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THE

INTRODUCTORY DISCOURSE

AND THE

LECTURES

DELIVERED BEFORE THE

AMERICAN INSTITUTE OF INSTRUCTION,

IN

BOSTON, AUGUST, 1834.

INCLUDING THE JOURNAL OF PROCEEDINGS,

AND

A LIST OF THE OFFICERS.

PUBLISHED UNDER THE DIRECTION OF THE BOARD OF CENSORS.



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1835.

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JOURNAL OF PROCEEDINGS.

FIFTH ANNUAL MEETING.

Representatives' Hall, Boston, Aug. 21, 1834.

THE Institute came to order at ten o'clock, A. M. Mr JAMES G. CARTER of Lancaster in the chair.

The record of doings of the last annual meeting were read in part; the reading of the remainder was dispensed with.

Voted, That Messrs A. Andrews of Charlestown, Pike, and Robinson of Boston, be a Committee to fix the hour of meeting of the Institute on the several days of the session, and also the hour at which the several lectures shall be given.

Voted, That Messrs H. W. Carter of Boston, A. Andrews of Charlestown, and W. H. Brooks of Salem, be a Committee to report for the newspapers the daily transactions of the Institute, and to announce the lectures and other exercises of the ensuing day.

Voted, That the Clergymen of Boston and the vicinity, and the editors of newspapers and other periodicals, be invited (through the papers) to attend the present session of the Institute.

Voted, That Messrs J. Abbott, G. F. Thayer, F. Emerson and P. Mackintosh of Boston, B. F. Farnsworth of Providence, W. H. Brooks of Salem, and J. Fairbank of Charlestown, be a Committee to nominate individuals for the officers of the Institute for the current year.

Voted, That Mr G. F. Thayer be a Committee to introduce the Rev. Mr Young of Boston, the officiating clergyman, into the Institute.

Voted, That the Committee of Arrangements be authorised to employ one or more reporters to take the discussions and extempore lectures, should there be any during the Session.

At twenty minutes before twelve o'clock, after prayer offered by the Rev. Mr Young, the Introductory Address was delivered by the Hon. CALEB CUSHING* of Newburyport, on "The proper Uses of Education;" after which the Institute adjourned, to meet at three o'clock, P. M.

Aug. 21. — Afternoon.

The Institute came to order at twenty minutes past three o'clock. Mr Carter of Lancaster in the chair.

Voted, That the Committee of Arrangements provide some suitable place for the meeting of the Institute for discussions in the evening, and that the doors be open to all who may wish to attend.

At half past three o'clock, a lecture was delivered by the Rev. WARREN BURTON of Hingham, Mass. on "The best Method of fixing the Attention of the Young."

The Committee of Nomination reported a list of names for officers of the Institute, which they were directed to have printed, for the use of the members.

At half past five o'clock, the Rev. Dr BEECHER, President of the Lane Theological Seminary, in Ohio, delivered a lecture (extempore) on "The State of Education, and Wants of the West."

After the lecture, Dr B. answered numerous questions relative to "the West," proposed to him by members of the Institute.

At half past six, the Institute adjourned, to meet at Chauncy Hall at half past seven in the evening.

Chauncy Hall. — Evening.

The Institute met according to adjournment. Mr J. G. Carter in the chair. After a few introductory remarks, the following question was discussed until a late hour. "Has the multi-

*General Mercer of Virginia was expected to have given the address, but from unexpected circumstances was prevented from visiting Boston this season. Mr Cushing was invited but a few days previous to the meeting of the Institute.

plication of school books on the same subject, been beneficial to the interests of Education?"—Adjourned to meet at the Representatives' Hall, at half past eight, tomorrow morning.

Friday, Aug. 22.

The Institute came to order at half past eight, A. M. Mr J. G. Carter in the chair.

Dr BEECHER, in compliance with the request of many members of the Institute, made last evening, was present this morning, and the questions (which were interrupted by the adjournment last evening) were resumed. To numerous inquiries relative to "the West," the Doctor gave prompt and satisfactory answers.

Voted, That the thanks of the Institute be presented to the Rev. Dr Beecher, for his interesting statements relative to "the West."

Voted, That any person who has been a member of the Institute more than one year, be allowed to invite two friends to the Lectures, the present session.

Voted, To reconsider the preceding vote, to afford opportunity to those opposed, to discuss the subject.

On renewal of the original motion,

Voted, That it be indefinitely postponed.

At half past nine o'clock, Dr WILLIAM GRIGG of Boston, delivered a lecture on "Physical Education," in the course of which Dr G. exhibited several pieces of apparatus, prepared under his direction.

At twenty minutes past eleven o'clock, Mr F. Emerson of Boston, proposed for discussion at this time, the following question, viz. "Can Common Schools be conducted profitably, without the aid of bodily Punishment?" which was adopted, and the discussion opened by the gentleman who proposed it. Mr Emerson was arrested in the course of his remarks, by the arrival of the hour (half past eleven) assigned for a lecture on "The Improvement of Common Schools," by Rev. STEPHEN FARLEY, of Amesbury, Mass., who was substituted for Dr KEAGY of Philadelphia, prevented by indisposition from fulfilling his engagement.

After the lecture by Mr Farley,

Voted, To proceed to the election of officers of the Institute for the current year, tomorrow, immediately after the second lecture.

The discussion on "Bodily Punishment" was then resumed, and sustained with much animation, by Mr F. Emerson, Rev. Mr Wright of Newbury, Mr Kimball of Needham, Mr Ryder of Boston, Mr Alcott of Germantown, and Mr Tenny of Andover. Most of the speakers maintained the negative of the question.

Mr F. Emerson of Boston, proposed the following resolutions, which after a few remarks were, by vote, laid upon the table.

Resolved, That the school system of Massachusetts requires legislative revision : therefore

Resolved, That the Legislature should be composed of a suitable portion of members, whose occupation has rendered them familiar with Common Schools.

At a few minutes past one, adjourned, to meet at three, P.M.

Aug. 22. — Afternoon.

The Institute came to order at a few minutes after three o'clock. Mr Carter in the chair.

L. MASON, Esq. delivered to a large audience a very interesting lecture, on "Music, as a Branch of School Instruction, and the Pestalozzian Method of teaching it," illustrated by a juvenile choir.

Moved and Voted, That the lecture by the Rev. Mr CARLL, which was to have been delivered at half past five this afternoon, be postponed till tomorrow.

The following was submitted by Mr Thayer, and adopted :

Resolved, That the introduction of Vocal Music into our Schools, is an object of high importance to the community, and the American Institute of Instruction do hereby most cordially recommend it to public favor.

Moved by Mr Thayer, and Voted, That in consequence of the almost exclusive applicability to parents, of the subject of the first two lectures tomorrow morning, every member of the Institute be authorised, for that day only, to introduce one person, who is a parent, to the lectures tomorrow.

Moved by Mr Pike, and Voted, That the number of invitations be extended to two parents, by each member (instead of one) as in the preceding vote.

At half past six, the Institute adjourned, to meet at half past seven this evening, at Chauncy Hall.

Chauncy Hall. — Evening.

The Institute came to order at a quarter before eight o'clock. Professor Griscom of Providence, in the chair.

The subject for discussion was, "The utility and inutility of pictures in books and publications, designed for children."

The discussion was commenced by Mr Alcott, of Germantown, (warmly in favor of pictures) and continued with deep interest for two hours, by Mr Wright of Newbury, Mr G. Brown of New York, H. W. Carter of Boston, A. Greenleaf of Salem, Dr W. A. Alcott of Boston, A. W. Pike of Boston, and Dr T. P. Jones of Washington, D. C. The last two strongly in the negative.

The discussion was closed by some pertinent remarks from the distinguished gentleman in the chair.

During the discussion, the merits of pictures (as was the intention of the Committee of Arrangements,) as we have them in books, &c. and not as they *might be*, were more particularly considered.

At ten o'clock, adjourned to half past eight tomorrow morning.

Saturday, Aug. 23.

The Institute met at the Representatives' Hall, and came to order a few minutes before nine. Mr J. G. Carter in the chair.

The minutes of yesterday were read.

At a quarter past nine o'clock a lecture was delivered to a large audience, by the Rev. JACOB ABBOTT of Boston, on "The Duties of Parents in Respect to the Schools where their Children are instructed."

On motion of Mr G. F. Thayer,

Voted, That Mr Abbott be requested to furnish the Institute with a copy of his lecture just delivered, for immediate publication, and that ten thousand copies be printed with the least possible delay, to be disposed of at the discretion of the Institute.

At twentyfive minutes after ten, the Rev. M. M. CARLL of Philadelphia, delivered a lecture on "Maternal Instruction, and the Management of Infant Schools."

After a recess of five minutes, at twelve o'clock, Dr J. V. C. SMITH of Boston, delivered a lecture (extempore) on "The Mechanism and Philosophy of the Organs of Sense:" illustrated by apparatus, exhibiting the several parts of the *Ear*.

At one o'clock, the Institute proceeded to the election of officers for the year, when the list reported by the Committee of Nomination was sustained, and the following gentlemen elected.

PRESIDENT OF THE INSTITUTE.

Hon. WILLIAM B. CALHOUN, Springfield, Mass

VICE PRESIDENTS.

Andrew S. Yates, Chittenango, N. Y.
 Roberts Vaux, Philadelphia, Penn.
 William C. Fowler, Middlebury, Vt.
 Benjamin Abbot, Exeter, N. H.
 John Pierpont, Boston, Mass.
 Asa Rand, Lowell, Mass.
 James G. Carter, Lancaster, Mass.
 Walter R. Johnson, Philadelphia, Penn.
 Benjamin D. Emerson, Roxbury, Mass.
 Elipha White, John's Island, S. C.
 George B. Emerson, Boston, Mass.
 Ebenezer Bailey, Boston, Mass.
 Henry K. Oliver, Salem, Mass.
 Caleb Cushing, Newburyport, Mass.
 Frederick Hall, Baltimore, Md.
 Samuel W. Seton, New-York City, N. Y.
 John Griscom, Providence, R. I.
 Lyman Beecher, Cincinnati, Ohio.
 Daniel Kimball, Needham, Mass.
 Nehemiah Cleaveland, Newbury, Mass.
 Stephen C. Phillips, Salem, Mass.

RECORDING SECRETARY.

Alfred W. Pike, Boston, Mass.

CORRESPONDING SECRETARIES.

Solomon P. Miles, Boston, Mass.

William C. Woodbridge, Boston, Mass.

TREASURER.

Richard B. Carter, Boston, Mass.

CURATORS.

Peter Mackintosh, Boston, Mass.

William H. Spear, Roxbury, Mass.

Henry W. Carter, Boston, Mass.

CENSORS.

Jacob Abbott, Boston, Mass.

Ethan A. Andrews, do. do.

Gideon F. Thayer, do. do.

COUNSELLORS.

William J. Adams, New-York City, N. Y.

William Russell, Germantown, Penn.

William Forrest, New-York City, N. Y.

John Kingsbury, Providence, R. I.

Abraham Andrews, Boston, Mass.

Alfred Greenleaf, Salem, Mass.

Benjamin Greenleaf, Bradford, Mass.

Richard G. Parker, Boston, “

William H. Brooks, Salem, “

Frederick Emerson, Boston, “

Benjamin F. Farnsworth, Providence, R. I.

Josiah Fairbank, Boston, Mass.

At half past one, the Institute adjourned to three o'clock P. M.

Aug. 23. — Afternoon.

The Institute came to order at three o'clock. Mr Carter in the chair.

Messrs Thayer of Boston, Adams of New York, and Cleveland of Newbury, were appointed a Committee to carry into effect the vote for publishing ten thousand copies of Mr Abbott's lecture.

At a quarter past three o'clock, Dr SMITH delivered the second part of his lecture, on "The Mechanism &c. of the Organs of Sense," illustrating the eye, by ingenious apparatus of his own invention, as in the forenoon.

At half past four o'clock, Mr THOMAS SHERWIN of Boston, delivered a lecture on "Teaching the Elements of Mathematics," illustrating his own method, by a class of boys in Algebra.

After the lecture, the Institute proceeded to business.

On motion of Mr Thayer,

Voted, That the Treasurer be authorised to employ agents to collect the sums due the Institute from members, for their annual assessments.

Voted, That the Treasurer, or his substitute, be requested to be present, with his book in the Hall, during the session of the Institute.

At six o'clock, adjourned, to meet at half past seven, at Chauncy Hall.

Chauncy Hall. — Evening.

At half past seven, the Institute met, according to adjournment. Mr Pettis of Boston in the chair.

Subject for discussion: "The Expediency of endeavoring to induce Children to regard their Studies as an Amusement, rather than a Labor."

Messrs De Witt of Providence, Alcott of Boston, Rev. Mr Swift of Falmouth, Alcott of Germantown, Professor Farnsworth, and Clark of Providence, took part in the discussion, which after occupying about an hour, was indefinitely postponed, and the question of Friday evening resumed, "The Utility and Inutility of pictures &c." and sustained by Dr Alcott of Boston, Professor Farnsworth, and others until ten o'clock, when the Institute adjourned until half past eight on Monday morning.

Monday, Aug. 25.

The Institute came to order at a quarter past nine, A. M. Mr J. Abbott in the chair.

The minutes of Saturday were read. Mr Thayer from the Committee of publication of Mr Abbott's lecture, reported progress.

On motion of Mr Pettis of Boston,

Voted, That each member of the Institute and all female teachers present, be allowed to take gratuitously, five copies of Mr Abbott's lecture, and if they desire them, one hundred copies for one dollar, and that they be requested to signify to the Treasurer, the number of copies, that they may wish to receive.

Moved by Mr Thayer, That the members and others present, be requested to state to the Treasurer, as early as may be, the number of copies of the forthcoming volume of the Transactions of the Institute, they will take.

Voted, To lay the preceding motion on the table.

At a quarter before ten o'clock, Dr A. A. GOULD of Boston, lectured on "Natural History as a Study for the Young."

At a quarter before eleven o'clock, Rev. H. WINSLOW of Boston, delivered a lecture on "The Danger of unsafe and useless Innovations, and the Indications of any Tendency to this Evil in our Country."

After the lecture, the Institute proceeded to business. Mr J. G. Carter in the chair.

The report of the Board of Directors was offered, and read from the chair, and accepted by the Institute, with directions that it be printed in the volume of the doings of the Institute.

Moved by Mr Abbott, That as the volume of the doings of the Institute cannot be published except at considerable and increasing expense to the Institute, and as the circulation of it is very limited, notwithstanding all the efforts that have been made to promote it, therefore,

Resolved, That the Censors be instructed to discontinue the publication of the Annual Transactions of the Institute, which was amended (as moved by Mr Wright) by striking out all after the word *Resolved*, and substituting, "That a Committee of five be appointed to consider the means of procuring and circulating the Annual Volume of the doings of the Institute," which was adopted, and the following gentlemen appointed the Committee; viz. Messrs Carter of Lancaster, Abbott, Sherwin, Thayer, and Pettis of Boston.

At one o'clock, the Institute adjourned to three, P. M.

Aug. 25. — Afternoon.

At three o'clock, the Institute met. Mr J. G. Carter in the chair ; when a lecture was delivered by Dr T. C. JACKSON of Boston, on " Chemistry and its Uses."

At four o'clock, the Institute adjourned, to meet at half past seven in the evening, at Chauncy Hall.

Chauncy Hall. — Evening.

The Institute met by adjournment, at half past seven at Chauncy Hall. Mr J. G. Carter in the chair.

The following rule was proposed by Mr Pettis of Boston, and adopted by the Institute—" That no speaker be allowed to hold the floor, longer than ten minutes at one time, and but once upon the same subject, to the exclusion of any member, who may wish to speak upon the subject under discussion."

Mr Alcott of Germantown, laid on the table, an essay on " Moral Instruction," written by Miss Robbins of Hartford, Conn. with the intention of presenting it to the Institute ; which was by vote, referred to the Censors, to be disposed of at their discretion.

The Secretary also laid on the table, an essay written by Mrs Hayward of South Boston, for the Institute, which was referred as the above.

The following subject was then adopted, for discussion : viz. " The Use and Abuse of Recommendations, in Reference to Subjects connected with Education."

Mr Greenleaf of Salem, opened the discussion, and was followed by Messrs Carter and Mackintosh of Boston, Wright of Newbury, Blanchard of Vermont, Pettis, Emerson, and Dr Alcott of Boston, Messrs Clark and Farnsworth of Providence, Gould Brown of New York, and Rev. Mr Allen of Northborough.

As the discussion was about being closed, Mr G. Brown of New York, offered the following resolves.

Resolved, That the public mind has been, and continues

to be, abundantly and shamefully abused, by the facility, with which our great men are in the habit of lending their names to certificates of recommendation for books and teachers: therefore,

Resolved, That this Institute do recommend to all gentlemen, who are applied to for such favors, to read thoroughly and attentively the Books which they recommend, and to state only what they may personally know of the individuals, who offer themselves as applicants for testimonials.

After some remarks by several individuals, it was moved by the Secretary, "that the subject before the Institute for discussion, and the resolutions submitted by Mr Brown, be indefinitely postponed," which motion was sustained, and at ten o'clock, the Institute adjourned, to meet at the Representatives' Hall at half past eight, on Tuesday morning.

Tuesday Morning, Aug. 26.

The Institute came to order at half past nine o'clock. Rev. E. White, of John's Island, S. C., in the chair.

Voted, On motion of Mr Pettis of Boston, "That the Committee appointed to superintend the publication of Mr Abbott's lecture, be requested to publish a notice of the lecture in the papers of the city."

Two "resolves" relative to "recommendations" introduced by Mr Wright of Newbury, were referred to a Committee, consisting of Mr Wright, Messrs Sherwin of Boston, and Farnsworth of Providence, to report thereon.

At ten minutes after ten o'clock, Hon. Judge STORY of Cambridge, delivered a lecture to a very full house, on "The Science of Government as a Branch of Popular Education."

At a quarter past eleven o'clock, Dr C. FOLLEN of Cambridge, lectured (mostly extempore) on "The Study of History, and the best Mode of prosecuting it."

The Committee appointed to consider the resolves, submitted by the Rev. Mr Wright of Newbury, reported the following, which were adopted.

Resolved, That this Institute regard the indiscriminate re-

commendation of teachers and school books as highly detrimental to the interests of Education.

Resolved, That we earnestly request all, to whom application may be made for recommendation, to exercise great caution and decision in regard to this subject.

Mr J. G. Carter, from the Committee appointed to devise means for procuring, and circulating the volume of the Annual doings of the Institute, made the following report.

Resolved, That the publication of the Lectures annually delivered before the American Institute of Instruction, in a volume for each year, tends to promote the objects of the Institute, by collecting in a convenient form, for distant information and future reference, a body of the fundamental principles of the science, as well as a mass of practical details in the art of Education, highly useful, if not essential to put inquirers upon the subject, in possession of the state and progress of that science and art in our country.

Resolved, That the publication of the several lectures, separately, would also tend to promote the objects of the Institute, by enabling the members and the public at large to receive information of our Transactions more speedily ; and by enabling the friends of Education to circulate particular parts of our doings, with special reference to enlightening, and stimulating the public mind in those respects, in which it most needs our efforts : therefore,

Resolved, That the Board of Censors be authorized and instructed, to procure the publication of the Transactions of the present session, both in the form of a volume, and in separate parts, on the best terms and in the most speedy manner the nature of the publication will allow.

The following was proposed as an amendment by Mr Abbott :

Resolved, That the Censors be authorized to draw on the Treasurer for such a sum, not exceeding however (——) as may be necessary to carry the foregoing resolutions into effect.

Moved by Mr Pike, That the blank be filled with the sum of One Hundred and Fifty Dollars, which was voted, and the

report submitted by Mr Carter, as amended by Mr Abbott, was accepted.

At half past one o'clock, the Institute adjourned, to meet at half past three, P. M.

Aug. 26. — Afternoon.

At half past three o'clock, the Institute met, agreeably to adjournment. Mr J. G. Carter in the chair.

Dr W. A. Alcott of Boston, submitted the following resolves, which were passed.

Resolved, That in view of the importance of the subjects discussed by Dr Grigg, in his lecture before this Institute, it is hereby recommended to every teacher, to become intimately acquainted with the principles of *Physical Education*.

Resolved, That the American Institute of Instruction regard with deep interest, the rapid increase of kindred institutions in this country, especially at the South and West, and desire to take this method of expressing their hearty thanks, for the coöperation of their brethren in the great cause of Instruction and Education.

Mr Clark of Providence, submitted the following resolution :

Resolved, That the introduction of a perfect alphabet of the English language is practicable, and would be of great and lasting benefit to those, who speak the language, and that the subject is eminently worthy the immediate attention of the American Institute of Instruction.

Mr Abbott of Boston, proposed to amend, by striking out all after the word *Resolved*, and substituting, " To submit to the Committee of Arrangements, to be adopted or not, at their option, for discussion at the next annual meeting of the Institute, the question, " Is it practicable to effect any reform in the alphabet of the English language ?" The amendment was sustained, and the resolution adopted.

At half past four o'clock, Dr J. BARBER of Cambridge, gave a lecture on " Phrenology, as connected with Education." After which a discussion took place upon the subject of the lecture, which was continued until half past six o'clock, when the Insti-

tute adjourned, to meet at half past seven this evening, at Chauncy Hall.

Chauncy Hall. — Evening.

At half past seven, the Institute met, according to adjournment. Mr Carter in the chair.

On motion of the Secretary, the rule adopted on Monday evening, restricting the speakers to ten minutes, &c. was by vote adopted for this evening.

The discussion on Phrenology, commenced in the afternoon, was resumed and continued with much animation, before a numerous and deeply interested audience, for more than two hours.

Mr Blanchard of Vermont, commenced the discussion, in opposition to Phrenology, and was followed by Mr Pettis of Boston, in favor of that science. Mr G. Brown of New York, followed in the negative, charging the Phrenologist as necessarily favoring materialism, and was replied to by Dr Barber, with much engagedness. Messrs Capen and Carter of Boston, also spoke in favor of Phrenology.

Mr Carter from the chair, and the Secretary proposed questions for information, to which Dr Barber and Mr Capen replied.

After the close of the discussion, Mr J. G. Carter, from the chair addressed the Institute in a few pertinent, parting remarks; when, on the thanks of the Institute being expressed by vote to the Vice President (Mr Carter) in the chair, and to the Secretary, for their prompt and faithful discharge of their respective duties, during the present session, the Institute adjourned, sine die.

ALFRED W. PIKE, *Rec. Sec'y.*

Boston, Aug. 26, 1834.

ANNUAL REPORT.

THE Directors, in obedience to the fifth section of the fifth article of the Constitution, ask leave to submit to the "American Institute of Instruction" the following Annual Report.

An examination of the records and evidences of our domestic correspondence, enables us to bear testimony to the fidelity of the Secretaries in the discharge of the several duties, pertaining to their respective offices.

The report of the Curators, although it presents no facts or suggestions, which demand special notice in a general view of the operations of the Institute during the year, yet gives assurance that that Board has been attentive to the interests intrusted to them, in the superintendence of the room of the Society and in the care, arrangement, and gradual enlargement of the library. The Directors avail themselves of this opportunity to make known to the members of the Institute generally, that the room belonging to them at the corner of School and Washington Streets, is open to them at all times during the year, as well as during the week of their anniversary session. The room has been conveniently furnished for our purposes; and by the liberality of publishers and authors, as well as from the funds of the Society, a large collection of the modern and most approved school books has been made. To these have been added several of the leading Periodicals of this and foreign countries, and some standard works on the philosophy of mind. This is but a small beginning, it is true, but still it is a beginning of an establishment, which the Directors hope their means will, at some

future time, allow them to enlarge and render still more attractive. The object of the Directors in incurring the expense of this establishment was, to afford a convenient place of resort for a leisure hour or two to all members of the Institute, whenever their business or inclination might bring them to this city. It was supposed that the collection of new school books and apparatus there collected, and to be collected, and the hope of meeting those engaged in similar pursuits, and having similar interests, would prove sufficiently attractive to make the Institute's room the school-master's exchange. It is confidently hoped and believed that members of the Institute, from a distance especially, will not neglect the opportunity here afforded, to possess themselves of information of some of the improvements of our times, to extend their acquaintance with one another, and exchange views upon the various topics of common interest and sympathy. And thus the hopes of the Directors will be realized, the interests of the profession be promoted, and the great cause of education be sensibly advanced.

The Report of the Treasurer has also been laid before us. By this it appears that the balance in the Treasury at the commencement of the year was, - - - - - \$313,55½

There has been received from the annual assessment of members,	- - - - -	65,00
From new members,	- - - - -	45,00
Tickets sold to individuals not members,	- - -	17,00

Making an aggregate amount of, - - - - - \$440,55½

The drafts paid by order of the Committee of Finance amount to - - - - - 176,75

Leaving a balance of - - - - - \$263,80½

Thus it appears that the expenditures of the year exceed the receipts of the year by the sum of - - - - - \$49,75

Although, in itself considered, it is always a discouraging circumstance in any enterprise to note a declining treasury, yet the Directors are happy to find that the deficit in this case, has not arisen from causes wholly beyond the control of the mem-

bers. There is much more than enough to cover the deficit of the year, yet due from members as their annual assessment. In the expenditures of the year, is also included the sum of \$50 which has been paid out to encourage the publication of the last volume of Transactions. But this by the contract of the Censors with our publishers, will be paid back to the Treasury whenever the sales of the volume shall have covered the expenses of its publication. The Directors have a hope that the time is not far distant, when the objects of the Institute will become so well known in the community, and the intrinsic merit of their Transactions be really so great and so generally acknowledged, that their publications shall cease to be an outlet from the Treasury, and perhaps the current be turned the other way.

The Directors are happy to bear testimony to the zeal, and fidelity of the Board of Censors, in the discharge of the arduous duties devolving upon them. Our annual volume has been published as promptly, we are persuaded, as the nature of the case, with even their untiring efforts, would allow. The Censors in regard to the price of our annual volume, and the despatch with which they can publish it, labor under many intrinsic difficulties, which should take away all surprise, if they do not also take away the regret at delay. They are expected to publish a handsome volume, which the community at large show no great desire to purchase, at a price less than the common one for such a volume, and yet, not to burden our Treasury. And they are expected to be prompt in a publication which depends for its parts upon the promptness of perhaps twenty different men, in different and distant parts of the country. Here, it will be perceived is an accumulation of contingencies, made up of the convenience of the several lecturers, to prepare their manuscripts for the press, and the casualties incident to a transmission of them from a distance, in addition to the almost endless slight delays in the mechanical execution. Any one of these contingencies turning out unfavorably, causes delay in the whole volume. We trust these, with other circumstances, which will readily occur to the Institute, will be sufficient to excuse any apparent delin-

quency heretofore, as well as prevent too sanguine expectations of promptness in our publications for the future.

In conclusion, the Directors find much in the history of the association to encourage them to renewed efforts. The increase of members during the year, — the general attendance of a large number of them at the anniversary meeting, and the numerous assembly of female teachers and mothers, constantly present at our exercises, are circumstances calculated to inspire confidence that the Institute is accomplishing the objects of its projectors; and answering the hopes of its friends; that it is elevating the character of the profession; is diffusing correct principles of the science, and making known improved practices in the art of education, and thus in one very important respect especially advancing the best interests of society and of men.

By order of the Directors,

JAMES G. CARTER.

Representatives' Hall, Aug. 1834.

NOTE BY THE CENSORS.

The Censors of the Institute regret the late appearance of this volume, and offer as their apology, the fact, that a series of untoward circumstances has baffled all their efforts to present it at an earlier day.—They would also state, that copies of seven of the Lectures delivered the last year, and intended for the volume, could not be procured; they having been partially or wholly unwritten. One of them, however, may be expected for the next volume.

They would also state, in behalf of the American Institute of Instruction, that it does not hold itself responsible for any sentiments contained in the Lectures of this or any other of its volumes. The Lecturers express their own opinions, and if they sometimes clash, the result may be, to elicit more truth.

Boston, May, 1835.

INTRODUCTORY LECTURE.

BY CALEB CUSHING.

INTRODUCTORY LECTURE.

OWING to the absence of the distinguished individual, (General Mercer of Virginia,) who was destined to fill this place on this occasion, the Directors of the Institute have imposed on me the duty of delivering the Introductory Discourse of the present year. This event is, in every point of view, matter of regret : because, while it deprives the opening of the session of its anticipated interest, and renders it necessary to substitute, in lieu of a more elaborate discourse, one prepared with but brief space for meditation or composition, — it interferes, at the same time, with a favorite and most valuable object of the Institute.

In the foundation of this society, as of every one having extensive purposes of intellectual or moral usefulness in view, the concentration of thoughts and efforts from divers quarters, and the combination of minds of various discipline, is an all essential principle. A characteristic trait of the European stock, whether in Europe or America, as it cannot but be perceived and admitted, is advancement, progression, improvement, change in the hope and prospect of a better condition. And this not so much on the part of governments, — which, in all times and places, more frequently resist than favor change, because the depositaries of power naturally clings to their own tenure of it, — but on the

part of the individual members of society, who in solitary meditation search out hidden truths, — maxims of ethics, economy and legislation, — facts in the physical sciences, — processes or instruments appertaining to the useful arts, — and who apply the discoveries or inventions thus made to the melioration and civilization of the world. And how is this end reached? Occasionally, there enters upon the scene of life a man of transcendent intellect, who, lighting upon a happy combination of circumstances, or rather placed in it by an all-seeing and all-disposing power, changes the whole face of things by the leviathan force of one mind; — some Bacon or Newton, who creates philosophy anew, — some Arkwright, Whitney, Fulton, Senefelder, Perkins, Davy, who, as with a touch of the enchanter's wand of genius, gives being or impulse to a great department of knowledge or art, — some Gregory, Luther, or Calvin, who in the seclusion of his cabinet plans and accomplishes the reformation of whole nations, — some Charlemagne or Napoleon, who revolutionizes Christendom. But these are not the ordinary cases of human efficiency. In the every-day course of affairs, in the bounded circle wherein most men are destined to move, it is by the combination of their joint efforts, — it is by the formation of voluntary societies, made up of the means, time, and talents, of persons comparatively feeble in the solitary individual, but strong in the aggregate body, — it is thus that so much of excellent and useful is effected in the social system of Europe and America.

Time would fail, in seeking to recount the multitude of societies, — moral, scientific, literary, religious, political, — scattered all over the great commonwealth of the civilized nations of Christendom. The famous fraternities of chivalry in the time of the Crusades were examples of them pertinent to that age; as were the associations for the suppression of vice and crime in the Spanish Peninsula, called the Holy Brotherhood, at a later period. In our own time,

objects of art, literature, morals, or politics, are their accustomed aim. Multitudinous as they are, it would be strange if some of them were not wrong in principle or perverted in their application. But their usefulness in the main seems indisputable ; at least there are no arguments adverse to them in the general, saving such as tend to suppress the propagation of knowledge or the cultivation of virtue, and in effect strike at the very foundations of social union. In simple truth, let me reiterate, they are the means, whereby all of us, however humble be our condition, may participate in great designs, which must otherwise devolve exclusively on pre-eminent wealth, ability, or power. This, moreover, is the answer to so much “bald unjointed chat,” which is abroad among us, to the prejudice of corporate enterprises of usefulness or gain ; for, as with joint efforts of mind, so with corporate investments of property ; they do but enable men of moderate capitals to share in great undertakings ; and therein lies their signal advantage for a country of enterprising inhabitants and unexhausted resources like the United States.

In the wide range of topics proper to the occasion, there is one, which passing events and pending discussions have served to force upon the attention, as peculiarly opportune to the character and objects of the Institute. What are the true uses of Instruction ? How much and how little of good or of evil does Education accomplish ? What are the limits of social or individual benefit, on the one hand, — what are, on the other, the hazards of injurious operation, — appertaining to the reciprocal influence of mind over mind ? All animated things about us are instinct with the love of knowledge ; colleges, schools, lyceums, associations for the dissemination of learning, abound ; to possess and cultivate the liberal and useful arts, — in a word, Instruction, is the distinguishing quality of a state of civilization, as to

neglect or be without it is the familiar indication of low and brutish barbarism. Ignorance, it is tritely said,

“ Ignorance is the curse of God,
Knowledge the wings with which we fly to heaven.”

Is this true? Is knowledge identical with virtue? And if it be not, what are the qualifications needed, to reduce the popular estimation of Instruction to a just standard? Grant that the neglect or absence of Instruction be rightly deemed the characteristic of a state of barbarism: is not a highly cultivated society prone to form an exaggerated conception of the value, or an erroneous judgment of the ends, of Instruction?

Understand me: I am not about to lend myself to the poor paradox, that the propagation of knowledge tends to corrupt the morals of a community, to give new virulence to vice, and augment the commission of crime. On the contrary, I propose to illustrate what seems to me the true answer to such depraved opinions, by discrimination of the genuine uses of Instruction. Most readers are aware of the controversy excited in France by the doctrine of Rousseau's celebrated prize-essay, to the effect that the re-establishment of science and art had proved prejudicial to the moral purity of modern Europe; nay, more, that it was essentially in the nature of knowledge to check the growth of virtue. However learnedly or ingeniously this position was maintained, it failed, of course, to gain foothold in society. Pyrrho might prove the non-existence of matter; Berkley and Hume might tread in a similar path of metaphysical subtilty; still, as in their case, so in that of Rousseau, common sense revolted from the absurdity of their conclusions by whatever plausible reasoning attained. To believe that savage life was better or happier than civilized; to persuade men to abandon the refined enjoyments and elevated occupations of civilization, and betake them-

selves to the mere sensual existence of the man of the woods, — was of course impossible ; and this extreme view of the subject passed off, as it well might, for the misguided ingenuity of a “self-torturing sophist.” But then came another idea equally chimerical, that of the perfectibility of the social system through the agency of mind upon mind, as argued by Condorcet. This doctrine, also, had its day ; and while thinkers are settling down in the conviction that change and vicissitude are the lot of nations as of men, they are in general equally convinced of the capacity of nations, and of men composing them, for an undefined, though not an infinite, degree of improvement, through the instrumentality of Instruction.

And to supply an obvious deficiency in the old European system, which, by reason of the limited number of places of education, admitted to them only the rich and great, or rather only the favored few, — the prevalent aim of our time, and especially our country, has been to render the advantages of knowledge accessible to the universal people. Common schools, supported by the rich for the elementary instruction of the poor, we have been accustomed to esteem as among the peculiar excellences of our institutions, especially in the Northern States. From Germany, where it so generally obtains, this pervading universality of education was recently adopted by France. Since the new infusion of democratic influence into the government of Great Britain, in that country, also, the expediency of it has come up for consideration ; but there its introduction is encountered in Parliament with plausible facts, urged prominently by an individual, who is himself a striking example of perverted talents, and of the insufficiency of knowledge to communicate virtue. Cobbett’s opinion seems to differ from Rousseau’s in this : — While Rousseau, with indiscriminate and consistent zeal, affirmed the inutility, or rather injurious quality, of science and art in the general,

and to the whole society, — Cobbett, with characteristic inconsistency, reforming, radical, and plebeian as he professes to be, raised as he is by the uplifting energies of cultivated Mind from the humblest condition of life, and exulting as he does that his advice has contributed to reduce thousands of the people of a civilized and Christian country from affluence or competency to want, for imputed aristocracy of character, like Eratosthenes beside the blackened masses of Diana's temple glorying in perpetual infamy, or like Satan rejoicing with such joy as devils can feel, and as they only can feel, over the expulsion of our first parents from Eden, — this man would confine the fruits of learning to the rich and high-born alone, excluding the laborious and the poor from all access to the blessed fountains of knowledge and of life. It is the confutation of this iniquitous theory, so totally at war with all the settled maxims of our national policy, and the confutation of it by plain and practical considerations, which constitutes the chief object of this discourse.

It is obvious at first blush, and therefore may as well be stated at once as the solution of the whole difficulty, that Cobbett, like Rousseau, mistakes the inadequacy of Instruction in certain of its branches or forms to produce a given result, for the quality of being essentially incompatible with that result. As Lord Althorpe justly replied, he was arguing, not of Education as it may and should be, but of bad or defective Education. Doubtless a man may be taught proficiency in crime. Besides, instruction in arithmetic or chirography, in the art of painting or sculpture, will not impart moral purity. How, indeed, should it? The knowledge of geography is not the true perception of moral truth. Granted. But are they inconsistent one with another? Does the acquisition of knowledge necessarily prevent or check the acquisition of virtue? That it does, and this by the operation of a fixed law of nature, is the fallacy at the bottom of all the sophistry in question.

Let me elucidate this point by analysing the elementary parts of Instruction or Education. It is not unfrequently distinguished, in a scientific use of terms, into physical, as applied to the body, and moral, as applied to the mind; but it may be more convenient at the present time, and equally clear, to use the word moral in its popular sense, as distinguished from intellectual. Instruction in seminaries of education, it is apparent, is chiefly applied to the formation of the mind, as thus contrasted with the character or moral feelings; to communicate sets of facts, processes of reasoning, arts, or accomplishments. But is not the character, the aggregate of each one's opinions and principles, a portion of the intellectual being of the man? May not good opinions, right principles, be imparted by instruction, as well as the knowledge of historical facts, or skill in the exercise of a liberal art? Not that our intellectual and moral peculiarities are wholly the result of Education. Far from it. Inborn differences in the force of the various capacities and tendencies of men are the subject of every day's observation; and to deny their existence is to reason against the most familiar facts of life. But is there any ground to maintain that, of these various capacities or tendencies, those which belong to what are popularly known as character or virtue, are any less susceptible of cultivation or developement than those which belong to the department of genius or intellect? Surely not. And yet the false opinions under review presuppose that instruction is absolutely limited to science, learning, and the arts. Those opinions assume that moral culture is, and can be, no part of Education.

It is curious to observe how the same questions recur upon men from time to time; and how continually we travel over and retread anew the same field of dispute in successive ages. That profound thinker, John Locke, insisted, in his day, upon this capital object of Education,

moral cultivation. "It is virtue, then, direct virtue," he says in his *Thoughts concerning Education*, "which is the hard and valuable part to be aimed at in education, and not a forward pertness, or any little arts of shifting. All other considerations should give way and be postponed to this. This is the solid and substantial good, which tutors should not only read, lecture and talk of, but the labor and art of education should furnish the mind with, and fasten there, and never cease till the young man had a true relish of it and placed his strength, his glory and his pleasure in it." To the same effect is Lord Kames, who says, in his *Hints on Education*: "It appears unaccountable that our teachers, generally, have directed their instructions to the head, with very little attention to the heart. From Aristotle down to Locke, books without number have been compiled for cultivating and improving the understanding, few in proportion for cultivating and improving the affections." And so Milton, also, in the very outset of his *Letter on Education*, premises that, "The end, then, of learning is to repair the ruin of our first parents, by inquiring to know God aright, and out of that knowledge to love him, to imitate him, to be like him, as we may the nearest, by possessing our souls of true virtue, which, being united to the heavenly grace of faith, makes up the highest perfection." And these are the suggestions of the truest and most practical wisdom not less than of venerable names and exalted authority: considerations, which have entirely escaped those, who so much depreciate the uses of Instruction in the improvement of society.

But let us examine the particular arguments for the new theory of the injurious effects of popular education, as given to us by its promulgator. Mr Roebuck introduced into the House of Commons a motion for inquiry into the means of establishing a system of National Education; which he carefully described as designed to cover moral

and religious, equally with intellectual, cultivation. Mr Cobbett objected to the motion absolutely and unequivocally, on account of, as he alleged, the injurious effects of instruction upon the laboring classes; and Lord Althorpe replied, defending the general object contemplated by Mr Roebuck.*

In Mr Cobbett's remarks, we find four distinct propositions maintained, or suggested for consideration.

First, it is alleged that contemporaneously with the diffusion of Education, crime has increased; and thereupon it is argued that Instruction has not been productive of any good, but rather on the whole of evil, implying that it has tended to produce the alleged increase of crime.

Secondly, it being stated that, of convicts in New York, a majority are educated persons, by which is probably intended persons possessed of elementary school instruction, it is inferred that Education has done nothing toward preventing crime in America.

Thirdly, it is urged that Instruction is calculated to inspire the poor with sentiments unsuited to their condition, and thus to render them unfit for the laborious uses of life.

Fourthly, the expense to the community, in the time abstracted from labor in the process of educating a child belonging to the laboring classes, is objected.

As to the last argument, it needs but a moment's consideration: because, if education be intrinsically injurious to the poor, it should be discarded for that cause, and there is no occasion to inquire into the expense of imparting it; and if it be beneficial to them, then it is simply a question whether the amount of benefit, either to the individual, or to society through him, be sufficient to justify the expense. In the latter alternative, we may justly tax the rich for the education of the poor; both on selfish principles, for the

* Extracts from the debate, June 3d, 1834, as appended to this Discourse.

general security of society, and of the rich as the part of it most needing protection ; and also on the same principle of humanity, which dictates the establishment of penitentiaries and hospitals at the public charge.

But the other considerations deserve to be maturely examined. If they be true, it is important for us, in this country, to understand it ; because here popular education obtains universally ; it is one of the favored means of improving the people and sustaining our democratic institutions ; and if we are mistaken in this, we are indeed fallen into a most fatal career of misgovernment. — On the contrary, if they be not true, and if the erroneous belief in them arises from a partial misconception of the uses of Instruction, or imperfection in its forms, then it behoves us to seek out and apply the proper remedy for the evil. And therefore let us look at the details of the general position, which is : that the education of the poor, by rendering them discontented with their condition of life, induces habits of idleness, or of indisposition to laborious occupation, and so prompts to the commission of crime as the means of subsistence.

Doubtless it is true that Education instils into men a desire to rise above the condition of menial servants ; and the gentry of England may have found the fathers of the last generation better servants than their sons of the present generation. But this effect naturally flows from every cause, which tends to raise the condition of the poor. It is occasioned, not more by the dissemination of knowledge among them, which opens to them higher conceptions of the ends of life, and sentiments of personal independence, than by the increase of wages connected with the prosperity of productive industry in any of its departments, such as the profits of commerce or manufacture, and the abundance and cheapness of lands. These circumstances tend to soften the distinction between master and servant,

by facilitating the rise of the latter to personal respectability and competency ; but they do not of themselves induce to the commission of crime or immorality. Nay, on the other hand, it is infirmity of character, which tends to throw persons back into a secondary or dependent condition in life.

Then supposing it to be the fact in the case of England, that intemperance, theft, and other descriptions of vice and crime have increased among the poor within a few years, is popular education the cause of the increase? Clearly, there is no necessary dependence of vice or crime upon knowledge. And there is ample cause, independent of that, for the prevalence of vice and crime in England at the present time ; such as the long duration of peace, the low price of labor, the overcrowded state of the population, the weight of taxation, and the consequent difficulty of procuring subsistence ; and above all, from the greater publicity given to crime, and the greater care in bringing it to punishment, produced by the increasing diffusion of knowledge. There is much reason to believe it is the increase of crime only in appearance, that is, of convictions, not of crimes, which forms the subject of so much speculation and study at the present time. And, if it were otherwise, instead of arguing that Education had produced this state of things, we would be disposed to argue that, but for education, there would have been a still greater amount of crime and immorality ; and that the real mischief was insufficiency in the quantity, or imperfection in the quality, of the education. True, Education has not prevented the perpetration of crime. And why? Independently of the essential infirmity of everything human, is it not because of the prevalent error, that instruction is the communication of knowledge, rather than the promoter of virtuous character? That good character is necessarily to ensue in the cultivation of knowledge?

Prior to the time, when the supposed increase of crimi-

nality in England attracted observation, the true state of the case, — the evil and the remedy, — were briefly alluded to in the very useful book on the Police of London, as follows:

“ Knowledge, so far as it refers to human actions, teaches to discern good from evil, and obviously directs and induces us, from self-love, to seek the one and avoid the other. But from the knowledge now sedulously diffused as popular instruction, we anticipate no injury whatever, and certainly no great benefit; much of it will never reach those for whom it is benevolently intended; and if it did, their lot forbids, without a previous change in their condition, that they can be able to appreciate and enjoy its objects, pleasures, and advantages. Of teachers of science we have abundance, of morality very few: yet the former is little more than the art of gain, the latter of happiness. Unless popular education include morality as well as science, it cannot be said to operate either as an instrument or preventive of depravity; it is simply an engine of power; and whether converted to evil or good, depends on impulses derived from other sources.”*

The statistics of crime afford us yet surer aid in the formation of a correct judgment in this matter. On occasion of the riots, which pervaded the agricultural districts of England during the closing months of the year 1830, the state of education among the guilty peasantry became a topic of inquiry, and the result is given as follows, in a foreign publication of authority:† —

“ Debasement of ignorance prevails to an extent, which could not be credited, were it not verified by the closest investigation. The facts which have been elicited respecting the

* *Treatise on the Police and Crimes of the Metropolis*, (1829) pp. 226, 227.

† Report of the British and Foreign School Society, quoted in *American Annals of Education*, vol. iv. p. 254.

moral and intellectual state of those counties, which have been disgraced by riots and acts of incendiarism, are truly affecting, and yet they are but a fair representation of the actual state of our peasantry. We call ourselves an enlightened nation, and educated people; and yet, out of nearly 700 prisoners put on trial in four counties, upwards of 260 were as ignorant as the savages of the desert: they could not read a single letter. Of the whole 700, only 150 could write, or even read with ease; and in the words of one of the chaplains to the jails, nearly the whole number were totally ignorant with regard to the nature and obligation of true religion."

It is quite preposterous to pretend that Education had any influence in augmenting crime amid a population thus brutally debased and ignorant. There is, however, an ascertained effect of the diffusion of knowledge upon crime, which is well stated in another foreign publication.*

"In Russia, where education can scarcely be said to exist, out of 5800 crimes committed within a certain period, 3500 were accompanied by violence; while in Pennsylvania, where education is more generally diffused, out of 7400 crimes, only 640 were accompanied by violence, being in the proportion of one twelfth of the whole, instead of three fifths, as in the former case. Thus the only ascertained effect of intellectual education on crime is to substitute fraud for force; the cunning of civilized, for the violence of savage life. Nor would even this small change be permanent. A highly intellectual community without moral principles and the habits of self-denial which religion imposes, would only prove a sleeping volcano, ready to awake every moment, and overthrow those very institutions under which it had been fostered. To increase the intellectual

* Scottish Guardian, quoted in American Annals of Education, vol. iv. p. 255.

powers and enlarge the knowledge, of a man devoid of principle, is only to create in him new desires, to make him restless and dissatisfied, hating those that are above him, and desirous of reducing all to his own level; and you have but to realize universally such a state of society to fill the cup of the world's guilt and misery to the brim."

These views, tending to explain the exact influence of civilization, or intellectual cultivation, upon the spread of crime, are confirmed by all the criminal returns in England. Thus it appears by the Parliamentary Returns, that of 14,947 convictions in England in 1832, so many as 10,130 were for simple larceny, and only 544 were for crimes coming under the head of daring and forcible violations of public order. And in the facts of the violent crimes, there is, on the whole, an absence of the outrage and cruelty, which used to be their concomitants, showing a progressive mitigation of the old ferocity of the uneducated populace. This fact is more strikingly true of the civic than of the rural population, in regard to which the result of social improvement in London is said to be this :* —

"All those descriptions of criminals, who were wont to inspire the greatest terror, have not indeed been entirely extirpated, but have at least been forced to withdraw from the systematic pursuit of their lawless courses. A burglary, a robbery on the highway, a murder, still occasionally occurs; but those bands of marauders, who used to make our streets and roads constantly unsafe at certain hours, are broken up and no longer exist. The law, which was formerly kept in check by those ruffians, is now master and keeps them in check. The substitution of this state of things is an immense gain. It is a step forward in civilization. The practical benefit of the change, — that which we feel every day and every hour, — is not to be told. We move about

* Companion to the Newspaper for 1833, p. 65, 81.

every where without dread or danger. No man, generally speaking, dreams of the chance of being either murdered, or knocked down, or robbed, of being exposed to injury either in person or property, while passing along the public street or the king's highway. The robberies, and assaults, and murders, that are still sometimes perpetrated, take place out of sight, in remote and lonely situations."

Not long after the discussion of the subject of education in the House of Commons, the same question came up in the House of Lords, in connexion with the subject of Prison Discipline, (June 29, 1834.) Lord Wharncliffe, in stating the fact that instruction did not of itself diminish crime, was careful, with a practical good sense and candid consideration, the reverse of the shallow dogmatism of Mr Cobbett, to confine himself to the kind and degree of education hitherto introduced into England:—in which view of the subject Lord Melbourne and Lord Brougham concurred, while they maintained the general utility of united moral and intellectual education.*

In France, also, the topic has undergone discussion, in books and in deliberative assemblies, and the statesmen of that country have arrived at the true solution of the question. MM. Dupin and Lucas have shown that in France, as in England, the higher crimes, those accompanied by brutality and violence, and proceeding from the revengeful and licentious passions, are lessened as we become more civilized and enlightened; whilst petty crimes against property will increase relatively, and it may be absolutely, as the extremes of wealth and poverty, and the accumulation of capital, become prominent features of society.† In making provision for moral and religious training, as a part of the new system of universal national education, which the French have lately adopted, they have shown their per-

* See extracts at the end of the Discourse.

† Encyclopædia Americana, *Crime*.

ception of the evil to be remedied, the deficiency to be supplied, in order to render Instruction an effective agent of moral and social elevation. On the other hand, the French Commissioners, MM. de Beaumont and de Tocqueville, in their work on the Penitentiary System of the United States, fall into the common error of treating instruction as merely the acquisition of certain rudiments of learning; and thence draw injurious inferences as to the utility of Education; which are very conclusively refuted by the American translator, Dr Lieber.*

So much for the argument founded on the relative state of crime and of Instruction in Europe. As for the case of New York, that may be shortly dismissed. In a community or country, where all the inhabitants are taught to read and write, it must needs be that the criminals also possess those qualifications. The fact, that they do so, proves, as in the other case, simply that Instruction has not absolutely put an end to the commission of crime; that, unaided, or as at present conducted, it is insufficient for the prevention of all crime. Besides, a very considerable portion of our criminal population is composed of hardened men self-exiled from other countries; by whom the most daring and systematic acts of robbery or burglary have usually been committed. And those among them, who could not read, are probably for the most part the off-scouring of the jails, and the refuse of the alms-houses of Europe.

These considerations, it may be, are didactic, dry, uninteresting; but there is no alternative, in discussing this part of the case, between being very plain or very superficial; since it is a point of statistical explanation, unsusceptible of rhetorical ornament. Assuming the view thus presented to be just, let us now regard its application to the United States.

The superiority of the people of the United States, at

* Penitentiary System in the United States, pp. 63, 247, and Int. p. xxv.

least of its free population, to Europeans in general, in three things, — liberality of political institutions, general diffusion of knowledge, and moral cultivation, — we will, as we safely may, take with us in the outset.

Look first at our political institutions. We continually speak of them in general terms; and the name, the aspiration of LIBERTY issues habitually and spontaneously from our lips; and free government, a government of the people and for the people, is ever present to our thoughts; and we ought all to appreciate the unrivalled blessings of our happy lot in the possession of republican institutions, which, however ill they be sometimes administered, or whatever imperfections there be in some of their parts, are yet in themselves such as no other land enjoys. But we do not understand, we cannot estimate, the extent of the evils in government and legislation, which paralyze the industry of so many fertile regions of Europe.

Take an illustration of this in the case of a country so fortune-favored even as England, where the discussions, connected with, and consequent upon, parliamentary reform, have yet forced upon our attention so many corruptions in her political system: — the oppression of the corn-laws and tithe-system in England, — the iniquity of the disabilities so long imposed upon Catholics, — the double tax for the support of two religions in Ireland, — the unbearable misery of the manufacturing and agricultural poor in both islands, — the universal sacrifice of the laboring classes to the privileges and perquisites of the nobles, the gentry, the clergy, and the office-holders. Still, how far is England above Spain, Germany, Russia, if not above France, in the liberality of her political institutions! But why look deep or seek far in quest of illustrations of this point, when one, the best of all, lies before us on the very surface of society. In parts of Europe, it is penal to possess arms, without a license, because the governors cannot trust them indiscrimin-

ately in the hands of the governed ; here it is penal not to possess them ; and the contrast affords most cogent proof of the state of social freedom relatively in Europe and America.

O fortunatos minium, sua si bona norint !

Happy, thrice happy should we be, did we never wantonly dash from our lips the cup of happiness and prosperity !

Look, secondly, at the intellectual condition of the people of the United States, or at least of New England. Here, every body acquires the elements of knowledge at our common schools ; lecture-rooms and lyceums abound on all hands ; elementary publications for the purposes of instruction in the rudiments of learning are accessible to the whole world ; and all the higher branches of information, religious teaching, moral wisdom, literary cultivation, are within the reach of the humblest individual in the land. Let me illustrate this position, also, by plain intelligible fact, instead of leaving it upon the trust of naked assertion.

There exist, in all countries, national usages, established modes of doing the most ordinary of things, which are pregnant with inference touching the points on which they bear. Here, the great abundance and extreme cheapness of newspapers are sufficiently evident ; and without pausing to reflect on the subject, we could scarce do justice to the value and amount of intelligence, which the diurnal press affords, penetrating as it does through all the relations of life. Spread forth before you that familiar sheet. As the eye glides over its crowded columns, it takes in at a glance what volumes of fact gathered from the very ends of the earth, and multiplied in how many forms of communication by the richest and grandest of human inventions ! In it, are single lines, a name even, which, speechless to the general eye, yet pours a tide of gladness, or deadens the very life's blood, in the bosom of many a fellow creature. The

solitary wife sits by her domestic hearth; as the infant prattler climbs on her knee, how thinks she of him, the cynosure of her heart's affections, far away along the great deep, tempest-tossed it may be upon its foaming surface, or perchance sunk "lower than plummet can reach," beneath its devouring waves;—and what rapture will not a simple word, meaningless to all beside, impart to her eager gaze! And how many hopes lie buried forever in the brief record of deaths, which that sheet contains; what a world of emotions and sufferings will not the imagination enter, if it follow up the scenes of sorrow, coupled with each of those unregarded names! Half a dozen lines chronicle the result of a battle fought in the mountains of Biscay or Navarre, or by the lemon-groves and vine-covered hills of Santarem. Call up the scene to your eyes; think of those about to meet in mortal conflict before you; the flash and pomp of advancing squadrons; the deep earth sending up the tramp of their hosts, and the roar of their cannon to the sky; and the lifeless thousands of brave hearts and gallant spirits that lie low upon that stricken field; reflect on crowns there to be lost and won, and the happiness or misery of millions of men hanging on the fearful issue of victory:—and then how changed is the interest embodied in a single cold half-read paragraph. I suggest these obvious considerations, merely as indicating the real, but unestimated, importance of those daily gazettes, which here every body reads, every body buys, every body has in his family as among the common conveniences of life. But how is it with this great source of intelligence elsewhere? In England, the great political newspapers are an expensive luxury, which people in general read only in news-rooms and coffee-houses, or hire by the hour, as is the established custom in London. That is, there are individuals, part of whose daily trade and business it is, to let newspapers by the hour, just as books are hired from a circulating library.

Again. Here, in New England, every man can read and write. At least, the exceptions to this are so few, that if in the course of business you encounter a person who cannot read and write, you may safely presume that he is not a native of the country. Whereas, in Europe, the common accomplishment of writing is but sparingly possessed by the laboring classes, so much so, that, as in the East, the business of writing for hire is a stated occupation of individuals in the cities and large towns, in many parts of the Continent; and little cabinets or offices are seen, where the public writer receives his customers:—So much inferior is the school condition of the general mass in Europe.

Look, in the third place, at the better moral and religious condition of the people of New England;—at their more correct observance of the ordinances of religion; at their free-handedness in the support of public worship, which although, in the existing state of the law, it is chiefly spontaneous, far exceeds that of other countries in aggregate amount of benefaction; at our peaceful and tranquil Sabbaths, which, elsewhere the world over, if we only except a part of Great Britain, are consigned to idleness, riot, vice, and violence;—look at all, in short, of pure, and peculiar, and admirable, and exalted, which distinguishes the moral aspect of New England. I say New England, because there, pre-eminently, is the fact apparent, and because in Virginia, Carolina, and elsewhere at the South, the existence of negro-servitude is a deadly blight upon the social and economical condition of the country, weighing down its prosperity, corrupting the morals of its people of every class and color, and condemning it to long endurance of public evils, which are the more melancholy to observe on account of the extreme difficulty of discovering how or when the source of them shall cease to exist. Nor do I allege the mere fact of prosperity as such,—the physical well-being of our population, in all that relates to the influence of

clothing, shelter, food, and other necessities of life, or the animal health and strength ; for this flows in some degree from the cheapness and abundance of lands, the consequent high price of labor, and the general profitableness of industry, in all parts of America as compared with Europe.

But the political, intellectual and moral condition of the United States, which I have thus dwelt upon, — so peculiar in itself, so strongly contrasted with that of other great and powerful nations, — whence then, does it spring? What is that potent principle, manifest in the character, conduct, and history of our fathers, and so efficacious in moulding the destinies of their sons, out of old materials building up this novel and original people in the New World? Undeniedly, it is the peculiar circumstances of our extraction and colonial origin, the ancestry we possess, and above all the systematic combination of moral and intellectual instruction in their schools and colleges, which serves to account for much that is excellent in our national manners — for the high tone of moral and religious feeling, and the general activity and industry of condition, and the wide diffusion of intelligence, which characterize the people of New England. Our fathers were not armed adventurers, stimulated by the lust of gold or ambition of conquest ; but men of deep-seated moral purposes, flying from persecution at home, to found in the wilderness of the New World a state after their own hearts ; bigoted, doubtless, like all men of high-souled and single-minded enthusiasm of resolve ; but withal well-informed beyond the ordinary rate of their countrymen of the same class, and honorably distinguished for a correctness of moral deportment, a devotedness to the duties of religion, and a self-relying thriftiness of temper, which have made the appellation of Puritans, originally applied in scorn and derision, to become at length a name of pride and glory. Such, it is matter of obvious remark

and familiar conviction, are the distinctive traits, which have descended to the inhabitants of the Eastern States. Have we sufficiently reflected how far causes, truly similar, although apparently different, have stamped a general conformity of character upon the people and institutions of the whole United States?

True it is, that the Puritans, the commonwealth's men and religious independents of the times of Hampden, Pym, Vane, and Cromwell, are the marked and predominant sect, among the primitive people of the British Colonies. True it is, that in the public schools founded among us, in the houses of religious worship built, in the great struggles of liberty conducted through years of suffering and bloodshed to a successful issue, and in the constitutional governments established, theirs was the consistent spirit of enlightened and indomitable independence, which gave life and soul to the efforts of the United Colonies. True it is, also, that the enterprising sons of New England have sown themselves as it were broadcast over the whole Continent, transporting the blessings of common schools, of universal religious instruction, and of industrious activity, along the bright track of their advance into the farthest West. But they stood not alone, oh no, they stood not alone, by the sacred altar of freedom, when they pledged their lives, their fortunes, and their honor, in their country's cause. Protestants, driven into exile by the intolerance of their Catholic brethren in France, had come to find themselves a refuge and a home in New York or Carolina; Catholics, forced abroad in like manner by the intolerance of their Protestant brethren of Britain, had planted themselves in Maryland: — testifying, by the community of their suffering and the diversity of its cause, that the parts of oppressor and oppressed belong to no peculiar form of religious faith, to no solitary stream of national blood. Nay, differing still from each of these great denominations of men, were the Quakers, who

peopled the banks of the Delaware, and gave their own character of puritanism in religion and morals to the legislation and social habits of that section of the Union. And so many thousands of wronged and persecuted Irish, and of sufferers for opinion's sake of the various nations of Europe, as from year to year they seek an asylum on our shores, — all these illustrate the workings of the great principle, which governed the settlement of the country, and which, qualified and mellowed by time, but by no means deprived of its native force, still pervades the social organization of the United States.

That great principle, the only true secret of useful popular education, is the simultaneous moral and intellectual institution of the people. This is the key-stone of our social arch; this, the fundamental doctrine of our political faith: — to make the cultivation of the mind go along hand in hand with the cultivation of the moral affections; whilst enlarging the understanding, to purify the heart; doing violence to no man's conscientious religious belief, and at the same time, in the systems of education and public instruction of whatever kind, to enforce the great moral truths, which belong alike to all the creeds of Christendom: such is the great hereditary social duty devolved on the descendants of the Puritans. In these principles were most of the Colonies settled; in obedience to them, were our common schools, our colleges, and our parishes established; in conformity therewith were the political constitutions of the country framed; in and by those principles only, under the benediction of God, and through the united intelligence and purity of the people, can our liberties be sustained; in the admonition of such principles are the native children of the soil nurtured and bred; and to the equal enjoyment of the blessings they ensure, do we welcome the adopted citizen, provided he takes care to bring with him the same pure and noble moral purposes which our fathers brought,

when, like them, he claims a refuge in America from oppression and injustice in Europe.

Of mere intellectual instruction, however, there are certain general effects, which it is impossible to deny. Such is its tendency to diffuse in society the spirit of freedom, although not seldom degenerating into licentiousness; and to augment the comforts of life through inventions or discoveries in useful art: — that is, in accelerating the general march of civilization. In addition to these general effects of mere intellectual instruction upon the social condition of mankind, in civilizing it, refining and elevating it, and augmenting the comforts and conveniences of life, it clearly has a moral effect in civilizing, refining and elevating the individual character. Or, as Addison phrases it, Education, “when it works upon a noble mind, draws out to view every latent virtue and perfection.” It gives men the faculty at least of judging between right and wrong, if it do not give them the disposition to use it. He who is intellectually well-informed, cannot but say, *Vide meliora proboque*; although he do add, *deteriora sequor*. All the fine-spun sophistry of Rousseau in objection to this, had been refuted, eighteen hundred years before it was written, in Tully’s beautiful Oration for Archias. The Genevan maintained that the pursuit of knowledge corrupted the manlier virtues of courage, patriotism, disinterestedness. Not so, said the Roman. It were, indeed, too much to affirm that those great men, the lights of their time, whose virtues are held up to us for imitation in the records of the past, were uniformly learned in all the teaching of books. Confess we, that many there have been of excellent spirit and virtue, and who without education, by a sort of divine institution of nature herself, have risen to moral dignity through their own inborn resources. Nay, be it admitted that nature more frequently achieves glory and virtue without learning, than learning without nature. But, at the same time, when, to a distin-

guished and illustrious nature a due proportion and conformation of teaching is adjoined, then there is used to result a singular and surpassing perfection of greatness ; as is the case of one divinely endowed of our fathers' time, Publius Africanus.* And the expressions which thus literally, with scarce a change in the place of a word, I transcribe from the pages of Cicero, are commended to our approbation by every argument of common sense and of universal experience.

But Instruction, intellectual Instruction, is not of itself sufficient to assure the moral purity of society ; and to compass this, we need to develope and follow out the principle of conjoined moral and intellectual education descended to us from the Puritans. Late events have shown us that, with all our intelligence, our morality, our sense of and respect for the force of religion, we slumber in false security. On the surface, the aspect of society is bright and smiling ; the loveliest flowers and the richest fruits of refined life are ours ; the fabric of our greatness lifts its proud battlements to the skies, and pushes down its foundations deep into the everlasting hills ; but the fires of disorder and corruption are smouldering beneath our feet, and may burst forth upon us at an hour in the earthquake voice of destruction. So far as writing, teaching, acting, may avail, there devolves upon us the duty of counteracting and conjuring down the troubled spirit of disorganization ; of drying up the sources of evil and opening new fountains of good ; of seeking to infuse into society not only liberal knowledge, but also sound moral and religious principles. There is, in the heart even of our purest cities, a crusade preaching against the very existence of social order, a war waged on all we most value in our national institutions, of religious, moral, social and political. The crisis calls loudly on the for-

* Ciceron. Orat. pro Archia, c. 7.

bearance and virtuous feeling of every member of society ; but there be classes of individuals, having pre-eminent capacity of usefulness. They are,

In the first place, all men of moderate means, who are looking to acquire a competency in life by their skill or application to business. These have particular cause to reprobate a disorganized state of society ; because such men, with their families cannot fail to be among the first victims of any great social convulsion. At such crises, the very rich may transfer their wealth to foreign funds, or during the early stages of change employ it in profitable usury at home ; the very poor have nothing to lose ; but all intermediate classes are crushed and swallowed up in the vortex of national calamity. Doubtless the apostles of the new political faith hold up an equal distribution of property as the lure of their school. If it were to be so, it would be to purchase a small temporary good at the price of a great permanent evil. But such a distribution would never take place. Suppose a social revolution to be impending in this country. What would be the practical effect of such a thing in prospect ? Capital in specie, ships, merchandize, would speedily fly to other lands ; what little gold or silver remained at home would be concealed in the earth ; manufactures, the mechanic arts, the business of transportation, commerce, would gradually dwindle away to the bare prime necessities of life ; canals, railroads, buildings, and other fixed improvements, would come to naught ; and of course under such circumstances, when destruction did but lay the weight of her hand upon the moneyed capitalist, she would tread into the dust all those who were engaged in the pursuits of productive enterprise. For them, little would be left but the desperate trade of civil war.

In the second place, the new social schemes which are abroad, and the pestilent doctrines of their school, demand

the deep indignation of the female sex, and of all, who, as fathers, as husbands, or as members of society in whatever relation, value the dignity and purity of that portion of the human race, which is given us for the ornament of life, its exquisite solace, its truest pledge of happiness, its lever of moral elevation, but which may be perverted into its degradation and its curse. It is a point susceptible of distinct and irrefragable proof as matter of history, that the social respectability of woman, exclusively proper to the countries of Christendom, is directly ascribable to two peculiar doctrines of Christianity, namely, the equal participation of woman in the external services and the spiritual sanctions of religion, and the singleness and sacredness of the marriage tie. Resting upon these two positions, we may safely challenge the world in argument. What, then, shall we say of creatures claiming to be reasonable, appealing to us for sympathy, and for extraordinary legal immunities, who, not content with levelling both sexes to the condition of brutes by impeaching our spiritual essence, would sink woman lower yet in moral debasement? What shall woman herself say to it? Woman's exalted social rank in all the countries of Christendom, her more especial and pervading personal influence in the United States, is altogether the consequence of her moral beauty of character, her delicacy, her refinement, her sensitive dignity of feeling and understanding. Strip her of them, and she is uncrowned of her diadem, dethroned from her queenly state, ungirded of her magic cestus. Shame on the shallow sophistry, if sophistry it be, and not rather miscreant profligacy, which labors to this bad end! Every principle of good order in society, every sentiment of truth and honor in the heart, recoils at such miserable profanation of the great gift of reason. For woman herself, so far as regards the general right feeling of the sex, we cannot fear :

A thousand liv'ried angels lacquey her,
Driving far off each thing of sin and guilt.

Still it behoves all and each of us in his appointed sphere of life, that we look well to this indiscriminate assault on religion, virtue, and property ; so that public indignation may stamp its authors with the burning brand of infamy and scorn.

Finally, to all professional teachers, whether literary or religious, the times appeal that they come in aid of the laws by their instruction and their authority. And if a layman might presume to utter counsels to such ears, it would be to urge on them the great paramount obligation, at the present time, of tempering in all things the vexed waves of society, and pouring upon them the oil of conciliation and fraternal peace, rather than of breathing into the bosom of the tempest a single added breath of agitation. It is too clear a case to argue. They play a desperate game, who give themselves up to fratricide contention in the face of a common foe. Whichsoever of *them* gains a victory, his will not be the triumph. Be it unitedly our endeavor to sustain the law ; to change it by lawful means if it err ; and whatever it promises to protect, that so long as the promise holds good, faithfully to protect. And as Christians, presuppose not ill of the Greek and Roman Churches, the early recipients, and for fifteen hundred years the sole depositaries and conservators of Christianity.

A P P E N D I X .

[Extracts from a debate in the British House of Commons, June 3d, 1834, on a motion of Mr Roebuck, Member for Bath, for a Committee to inquire into the means for establishing a system of National Education.]

No. I. — pp. 11.

Mr COBBETT said : — He rose for the purpose of making a few observations on the scheme of the hon. and learned member for Bath. He could not help fearing that his scheme would not be productive of good. On the subject of education in this country, it was not philosophy or reasoning that could guide, but recourse ought rather to be had to experience. Everybody knew that within the last thirtyfive years Lancasterian and other schools had been founded, and education had increased twenty fold, but experience showed that the morals of the people had not mended with the increase of education. It had even been admitted that night, that drunkenness had increased wonderfully within latter years, so that education did not even prevent drunkenness. He repeated that all this increase of education had not been productive of any good, and he ventured to say that there was not a single country gentleman who would not say that the fathers of the last generation made better laborers, better servants, and better men, than their sons of the present generation. This proved that the laboring classes were much better without that intellectual enjoyment, which the hon. and learned member for Bath was anxious to increase to them, than they were with it. What also was the state of crime in England and Wales now, as com-

pared with its amount at the period the education of the lower orders of the people began? Why, the proportion was now at least four if not seven times as great as it was when education commenced.

[An hon. Member here said : ninefold.]

Mr Cobbett resumed. — So much the better for his (Mr C.'s) argument. Within the same period, too, the number of illegitimate children had increased to a prodigious extent ; so that in this respect the morality of the people could not be said to have been advanced by education. The hon. and learned member for Bath had contended that the system of education in this country was wrong altogether, and had instanced, as an example worthy of imitation, the state of things in New York, in America, where he had said half a million of human beings were educated, and in the full tide of enjoyment of intellectual matter. He would tell the hon. and learned member the state of things in the district on the condition of which he relied. He (Mr Cobbett) had written to New York for information, since the subject was under consideration last year, and he had received an account signed by the Recorder of New York, which, though he had it not now with him, he would produce tomorrow to the hon. and learned gentleman. This account embraced a comparative statement of the number of educated criminals and the number of uneducated criminals, and showed a very considerable majority of the former over the latter. So much for education preventing crime either in America or England. It was a good people, and not a gabbling people, that was wanted in this country, and this smattering of education would only raise the laborers of this country above the situations best suited to their own interests and those of their families. It would put into their heads that they were not born to labor, but to get their living without it. By the plan suggested by the hon. and learned member for Bath the child of the laborer could not complete his education until he was at least fifteen or sixteen years of age ; but in the mean time he should be glad to know who was to keep a great eating, and drinking, and

guzzling boy — who was to find him with provender all that time? Who was to satisfy his body while his intellects were being filled? The hon. and learned gentleman had said, that the laborer's boy was to receive instruction after the day's labor is over; but if the hon. and learned member knew anything of labor, he would rather prefer going to sleep. In short, if all were to be scholars, it would be necessary for the whole population to shut their mouths and determine to eat no more. The interference with labor would be the very worst course which could be pursued by the Legislature.

The consequence of putting the children of poor people to school would be to keep them from work; children were never too young for work. He had two boys under seven years of age now in his employ to keep the birds away from the corn, and each of them received half a crown a week. This was of some consequence to their fathers; it was gaining money to them. If you send the boys of poor people to slip-slop school-mistresses — if you send them to a drunken school-master — or, if you send them to a conceited coxcomb school-master, they would not keep birds away from the corn, but would run and shelter themselves under the hedge when the rain began to pelt.* They would be brought up with such high notions, that there would be no use of them whatever. For these reasons, therefore, he objected to any system of national education, and he would oppose the motion of the hon. and learned gentleman.

No. II. — p. 17.

(Extracts from a debate in the House of Lords, June 29, 1834.)

LORD WHARNCLIFFE said: "There was another plan which had been tried with a view of producing reform in the great mass of the people; and that was education. He confessed he was one of those, who thought education would have greatly decreased crime. He regretted to say that he was disappointed.

* I insert Mr Cobbett's speech with all its tissue of coarseness and ribaldry upon its head, as the best means of showing the inconsistency and poor prejudices of the man.

He believed that the kind of education which had been afforded had increased crime; and the more he saw, the more he was convinced of that fact. He did not doubt that the general system of education was very valuable for some purposes; but he very much doubted if the present system gave to the individuals who were subjected to it, such a power over their minds as enabled them to resist the temptation to commit crime. In support of this opinion the noble lord referred to the report of the French Commissioners on the state of education in the United States. Those Commissioners declared it to be the result of their inquiry, that the more knowledge was diffused the more crime was increased. This they attributed to the circumstance, that knowledge created wants among the humbler classes, which the perpetration of crime alone could gratify. Knowledge multiplied social relations; it produced a desire for social enjoyments; and the means of cultivating those relations, and indulging in those enjoyments which could not be honestly obtained by the lower classes in their present condition. Such was the opinion of the French Commissioners. He was very much afraid that those gentlemen were right and that the greater the diffusion of education in the country, the greater was the temptation to crime. He by no means doubted that a proper discipline of the mind in youth was highly advantageous, but he very much doubted if the mere acquisition of knowledge as such, was so. Of this he was certain, and he said it with regret, that the kind and degree of education which had hitherto been introduced into this country had not had the effect of diminishing crime."

VISCOUNT MELBOURNE said: "It was true, as his noble friend had stated, that this increase of crime had taken place during a period when the greatest exertions were made to improve the moral condition of the country. This had been stated by his noble friend with great candor and moderation; but in other places it had frequently been stated with great bitterness, and in the shape of a taunt. It had been asked what had the Church, what had our schools, our mechanics' institutes and societies, done for the moral improvement of the people? This was not

a fair way of reasoning. It was necessary to consider what these persons were graciously pleased to leave out of their consideration, — the strength of the antagonist forces against which they had to strive. Neither ought the increase of population to be forgotten. It was to be expected that more crime would be committed by a larger than a smaller population ; and it should be remembered also that if crime had increased, the country had greatly increased in wealth, luxury, indulgence, and extent of desire, which were the real causes of and instigations to crime. It was against these antagonist powers that the moral forces of society had to contend, and considering their potency, he thought they had kept their ground pretty well ; nor was it to be made a charge against them that they had not produced what, in such a state of society, was an impossibility, viz. perfect purity and virtue. His noble friend had said that he did not perceive that any of those advantages had resulted from education which had been anticipated, nor did he expect that any of those advantages would flow from it in future. But his noble friend had not made any distinction between education and the objects to which it was directed. The object of education was the diffusion of knowledge, and knowledge, as they were justly told, was power. But power of itself was neither good nor bad, but beneficial or disadvantageous, according as it was used or applied. Knowledge itself did not secure virtue, and they knew, by melancholy examples, that the possession of the highest mental endowments, and the most cultivated intellect, did not save the possessors from the stains of immorality and vice. *Bonis literis Græcis imbutus bonam mentem non induerat.* The effects resulting from education must depend on the nature and objects of the education. If the education given were such as to give the lower orders opinions above their situations, and to impart to them a distaste for labor, it would be the most fatal and destructive gift which could be presented to them ; an apple from the tree of death. But if the education given to them were such as to teach them the necessity of labor, and of conforming themselves to their situations in life, he could have no doubt that education, based upon

such principles, and conducted in such a manner, would be productive of the most advantageous result.

The LORD CHANCELLOR was sorry to stand in the way of his noble friend; but, from the situation in which he stood, he should not think that he was well discharging his duty if he did not make a few observations on a subject so very candidly, with so much moderation, with no exaggeration, and with so much philosophical calmness, brought before the House. His noble friend, who had introduced this motion, was of all individuals, in or out of that House, the one most capable, if the profession of the law had more opportunities than any other, of seeing the working of our system of criminal law, from his situation as chairman of the west riding of the county of York. It was very possible that the diminution of crime had not borne that proportion which sanguine men expected to the progress of improvement in society. But this circumstance ought not to fill them with despair, with apprehension for the future, or regret for their past efforts, or even make them disinclined to continue those efforts in the same direction. The question in this case was rather an abstract one, and did not appear to lead directly to any practical result. It was, whether or not the increase of knowledge, the more general diffusion of it amongst all classes of the community, tended to prevent the commission of crime? He was far from being able to come to the conclusion which had been somewhat more dogmatically stated than he should have expected, in the report of two French gentlemen sent out by the French King, that it was now universally admitted that those parts of the world where knowledge was most diffused were not the most exempt from crime, but rather the contrary. Who ever expected that increasing the knowledge of the community would immediately and directly have the effect of diminishing crime? Whoever did entertain such an expectation had no right to complain of disappointment, when he found the effect did not follow his meritorious labors, because he had formed groundless and unreasonable expectations. The tendency was to improve the habits of the people, to better their principles, and to amend all that constituted their character. Princi-

ples and feelings combined made up what is called human character. And that the tendency of knowledge was to amend this character by the operation of knowledge, and in proportion to its diffusion, there could be no doubt. Its tendency was to increase habits of reflection, to enlarge the mind, and render it more capable of receiving pleasurable impressions from, and taking an interest in, matters of other than mere sensual gratification. This process operates likewise on the feelings, and necessarily tends to improve the character and conduct of the individual, to increase prudential habits, and to cultivate, in their purest form, the feelings and affections of the heart. Now, he took these things to be so pregnant, that it hardly required any illustration from fact, or any demonstration from reasoning, to show that the inevitable consequences of such a change in the human character must inevitably diminish crime. The effects of knowledge were not new; they were well known to the ancients, who had said the same thing in much better words :—

“Emollit mores, nec sinit esse ferus.”

Knowledge increased the prudential habits and improved the feelings and disposition. That it was the tendency of education to diminish crime was not matter of argument, but of fact. Let any man go into the gaols, and examine into the condition of the criminals, whether they were well educated or not; and he was perfectly certain that the well-educated would be found to form a very small proportion indeed of the criminals under apprehension, and smaller still of those under conviction. But the way in which this mistake had been committed was this, that in reference to this question knowledge and education were too frequently confounded. It often happened that what was taken for instruction and education was merely the first step towards it, and many persons were considered as educated, who, in reality, were possessed of nothing worthy the name of knowledge or instruction. Reading, writing, and accounts had, during the last thirty years, too often been held to imply education. A person possessed of these might, indeed, have the means of educating himself; but it did not, by any means,

follow that he would exercise those means. It was too much to assume that, because in the agricultural districts, where fewer means of education existed, crime was not so abundant as in the better educated and most thickly populated manufacturing districts, therefore education had no influence in diminishing crime. * * * * No one ever said that reading meant instruction and education; still less did any one ever say that reading alone would produce the effects of instruction. His noble friend, who spoke last, and who had spoken so eloquently, had entirely expressed his views. Knowledge is power in whatever way it is used, but whether that power will be available to virtue depends on the kind of education which has been given. If a people be educated without any regard to moral instruction, it is only putting instruments into their hands, which they have every motive to misuse. But it was said, why does not education put a stop to the commission of crime? Education certainly exercises a great influence over the moral character, but he never yet heard it asserted that knowledge would alter the nature of the human being, or convert him into something of a higher or purer order than the ordinary race of mortality. His noble friend had made some remarkable statistical statements, and it appeared that more crimes were now committed in eight months, than formerly in twelve; but, had the increase of population been taken into account? But was it not to be expected that the criminals would be more numerous in a population of 14,000,000, than in a population of 7,000,000 or 8,000,000? Within less than a century the population had doubled. Within the last ten years, or rather in the calculations made from 1821 to 1831, the population of England and Wales had increased two millions. Surely it would not for a moment be expected that an increase so great could have taken place without a consequent increase of crime. There were other elements at work beside the increase of population, to which the increase of crime was to be attributed. The defects in our legislation had a direct tendency to create crime. * * He hoped he had said enough to show the necessity of taking into account the counteracting causes which operated to prevent

the extension of knowledge, from producing the effect which, but for these obstacles, its promoters had calculated upon. When the contemplated reformatations should take place, then would be seen the improvement which would follow in the train of knowledge. On one good result of education there would be no difference of opinion. There was one class of offences which varied in extent and degree exactly in proportion with the degree of knowledge which obtained in any community, and here it was to be observed, that knowledge was not in itself a cause of virtue, for the mind may be improved without any improvement of the disposition, and then knowledge may have the effect of making the mind, which was possessed of it, more active in a wrong course, and more powerful in evil; but it was evident, that in proportion to the learning of a country, crimes of violence became more rare. This was obvious in France, and equally so in this country, although crimes of fraud and larceny had not thus decreased in similar proportion.

LECTURE I.

ON THE
BEST MODE OF FIXING
THE
ATTENTION OF THE YOUNG.

By WARREN BURTON.

FIXING THE ATTENTION OF THE YOUNG.

WE will first consider on what attention naturally depends. The degree of attention with which any one applies to a subject, depends on the motives he has for so doing. Men work, and children play with willingness and their might, because there are certain sufficient motives which induce them. So likewise, give the young adequate motives to study, and they will study with all their heart and strength. The *best* mode of fixing the attention, therefore, is to furnish those motives which will best induce the young to apply themselves to the subjects of education. But these motives have been already very fully exhibited in the lectures previously delivered before the Institute, and in those excellent periodicals, the *Journal of Education*, and its successor the *Annals*. I would not repeat poorly what has been well expressed before on the same subject ; I must therefore look around and see if anything additional can possibly be found respecting the best motives to study, and the best mode of fixing the attention. It strikes me that something more might be profitably said on emulation as a motive to application. It appears from the lecture delivered last year on this subject, and from the approbation with which many received its sentiments, that the reflecting and the experienced are not

all opposed to its use. It is certain that the principle is strongly appealed to almost universally in our seminaries of learning. If it is an evil principle, it should be in general let alone, and other and purer motives should take its place. I may be permitted, therefore, to offer some views on this topic, which I have not seen elsewhere, or at least not seen developed at much length. I would afterward suggest some motives which might take the place of emulation, certainly with a safety, if not a success that does not attend this. Perhaps I ought to apologise for bringing to view the system pursued in colleges, more frequently and particularly than those prevalent in lower institutions. I believe that the use of the objectionable principle is more stably fixed and enormously bad in colleges than anywhere else; besides, little comparatively has been directly and earnestly urged against it as there operating.

What is emulation as it has been applied in education? It is the desire to outdo others who belong to the same class and are engaged in the same studies. It amounts to close and personal rivalry, and implies that if one gains and rejoices, another must lose and regret. Certain external distinctions are offered as marks of superiority. In common schools, there is the HEAD, and the graduations of honor thence to the *foot*. Then there are medals, books, and certificates, held up as prizes to be contended for. In colleges, there are what are called PARTS, from the grand oration down to the insignificant and unspoken theme, which indicates that even stupidity has been struggling for honors, or that idleness has had them conferred, such as they are, whether it would or not. Those who receive these tokens, or rather the most respectable of them, are regarded as meritorious, above others to whom they have not been accorded. Such is the system that has prevailed almost universally, and continues almost as universally as ever. My first objection to it is the exceeding injustice to

which it gives rise. We should naturally say that a person's reward in any course should be in proportion to his exertions. When one arrives at some exalted station, through a long course of unremitted and laudable endeavor, our feelings toward him in respect to the distinction, are far different from what they would be, had it been conferred on him by inheritance, or by the intrigues or blind impulse of party. Supposing that the language of Scripture is to be literally fulfilled, and that mankind are to be rewarded and punished in a future life by judicial decision, all would anticipate, with the utmost confidence, from Infinite justice, that it would reward according to the efforts that had been made, and the difficulties that had been overcome. No one would dishonor the Divine judgment seat, with even the flitting fancy, that he whose moral path had been smooth and of easy ascent, would receive so warm a plaudit and so rich a crown, as he who had attained the same height over a rough and impeded way. Reason and conscience tell us what would be justice in heaven, and should we listen, would they not tell us what would be justice on earth? In the educational course, if external rewards are conferred, ought they not to be conferred according to the same rule; that is, according to the exertions made, and the obstacles surmounted? But it is not so in our seminaries of learning. There, the members of a class are treated as if they all possessed by nature equal ability to run the same race, and that the difference between one and another, lay in the heart — in the will rather than in the intellect. The purpose of the rewards proposed, is to arouse the sleeping affections, and impel the sluggish will. Of course, the award ought to be made somewhat in proportion as the heart has been given to duty. Now scholars differ from each other in intellectual capacity, full as much as in features or in bodily dimensions and strength, and perhaps more. Some are inferior to others in certain par-

ticular faculties, and some are inferior in the whole intellect. There are those whom nature has endowed with extraordinary talents. These will, perhaps, assume and maintain the first rank at recitation, with very little exertion in comparison with others. Such have been known to be among the most idle and dissipated at college, and yet to bear away some of the first honors, when in fact there belonged to them no more real desert for their scholarship, than belonged to Goliath for wielding a spear like a weaver's beam in his giant hand, instead of a weapon of ordinary size. It may not indeed very often happen that a brilliant but profligate young man takes the higher honors, but it does very frequently, indeed I may say always, happen that the rewards are in proportion to natural capacity, rather than to exertion or a conscientious devotion to the objects of education. Now is this justice? It surely is; I hear it replied by the advocate for emulation. If a youth possesses superior powers, "he has a right to all the fruits of these powers. He has a right to take the standing his Maker has given him. It is his estate to which he can make out the best of all titles — the gift of God." This is the language of the lecture given here last year in favor of emulation. It is rejoined that such a youth has justice done him, he enjoys the fruits of his powers, he takes his proper standing, whether the head of a spelling-class at school or the English oration at college be given him or not. His abilities if exercised will be known; his companions will accord to him the distinction of possessing them, and he will be conscious of them himself. Now this accorded distinction, and this conscious possession, are those fruits which he has a right to enjoy. Besides, the ease with which he can accomplish his studies, is another happy consequence which no one can take from him. Then again, the Phrenologists maintain that God's own finger, as it were, writes the name and the number of talents on the very

brow of their possessor, for all the world to read, will they but study the divine hand-writing. If this be true, there are insignia before the eyes of all, which no man can take away. At any rate, to say that talent cannot have its proper standing and due honor, without medals, parts, and other prizes, is about the same as saying that the great stars of heaven show not forth their superior magnitude and surpassing glory, unless observed through a gilded telescope.

The next objection which may be brought against emulation, as it has been used, is the injury to health of which it is often the occasion. The close competition between individuals, in our colleges especially, has laid the foundation in many a constitution for feeble health the whole life afterward. It has caused many to be cut off in the flower of their days. A young man born in poverty and obscurity, is endued with a superior nature. He aspires to ascend the intellectual heights and command that wide horizon of knowledge which is the privilege of the educated few. He flings aside the rustic's tools and garb, and fits hastily for college. He perhaps barely enters, in consequence of too brief a preparation. There he finds that rank and distinction depend on brilliancy of recitation. He has not wealth, he has not genteel and influential connexions, and he feels that his success in life, at the outset at least, depends somewhat on his collegiate standing. A high standing then he is resolved to attain, but it is only by severe, sickening, and an almost killing application that he can rise above his disadvantages. He bows himself to the work, and he bows himself perhaps to the yoke of long and wretched infirmity, in consequence. Perhaps he is borne from consumption's lingering bed to the grave, before half the collegiate course shall have been passed. He had better have continued at the hammer or the plough, and been contented with the reading of labor's scanty leisure.

But it is not always the student, such as just described, who is the only sufferer ; the rich, the well prepared, and at the same time highly talented, sometimes sacrifice health and life to the merciless spirit of emulation. Now the physical well-being of the young, should be most carefully watched over by their instructors and guardians. Is not a system, therefore, which directly tends to the destruction or jeopardy of health, to say the least, somewhat questionable ?

I have spoken of the danger of the emulation system to the bodily health ; there is still greater and more general danger to the spiritual nature. What anxieties does it occasion to the alternately hoping and fearing aspirant ! What discouragement, despondency, disappointment, and despair, does it introduce into what should be the calm, self-possessed, and steadily advancing mind ! Then there is that bane of the sweet social relations — envy ; and with it detraction, and next, bitter malignity. Such at least, is the tendency of emulation. The principle may be likened to that diabolical spirit who was the father of sin, who was the mother of death.

There is another evil ; emulation diverts the student's aim from the real end of study. He is gradually led to think not of the discipline of his mind and the acquisition of knowledge, but of the mere art of recitation and the mark he may thereby acquire. I have known young men who entered college with no other intention than to inform and elevate and strengthen their minds, who soon forgot everything but the paltry honors they must yield to their rivals, if they did not strive for them themselves. The pleasures of study were altogether swallowed up in hopes and fears about recitation and rank. And they were heartily rejoiced when the collegiate course was terminated, not because they had been educated and prepared for high usefulness, but because the torture of rivalry was done, and they were freed from anxiety and miserable suspense, concerning their final standing and closing honors.

Again, emulation has been far from producing its intended effect. It has had a directly contrary effect on no small portion of students. Nearly if not quite one half of every class at college, are entirely unreachd by this principle, unless it be to stop and stupify the intellect instead of stimulating it. They reason in this way—if we cannot stand *high*, let us have no standing at all. Let us be known as devoting our time to anything rather than our prescribed books, then our low rank will be imputed not to the lack of talents, but of industry. Some of the young at the greater seminaries, much prefer to be thought destitute of morals than of intellect. I have no doubt that emulation, in past times, has been of considerable use, in consequence of the absence of other and better motives. Had this principle not been artificially and keenly excited, and other motives not been applied, there would indeed have been but little study, and our seminaries would have been but little better than halls of amusement and social lounging places. The philosophy of youthful nature has not been understood, and the true and best modes of education have been undiscovered; during this period of ignorance, the emulation of the schools has been better than no exciting motive at all. For a large portion of the studies have been of such a character, or have been presented in such a manner, that the youth would hardly pursue them with diligence, without some strong stimulant. He would scarcely do it for the simple pleasure of study. Emulation, like the principle of resentment, was implanted by the Creator, to be of use in the primary stages of the progress of our race, when the animal prevailed over the spiritual, in the human constitution. As better motives become understood and can be brought to bear on the conduct with efficiency, this primitive course and *heathen* stimulant should be let alone. Nevertheless, it will not altogether

slumber, but like resentment, it will kindle up and fire the heart sufficiently, without any artificial cherishing.

No one is pleased to be outdone. You may say not a word about excelling, present no prize, and accord not the least external distinction, and still the native emulation of many will not permit them to be easily excelled. I have no objection to this natural and gentle operation of the principle in question, provided that envy and other unhappy feelings do not intrude into its company. I would even say that there are some cases in which I would take pains to excite emulation to keener action. There is now and then a dull and sluggish soul, which needs the aid of such a stimulant. Or, to use the language of the ingenious lecturer before alluded to, "there are those doubtful and discouraged natures, who view the summits of learning, and despair to scale them." I say with him, that "in such hearts this quickening fire needs to be lighted up," that is, I would add, if all better and nobler motives fail of effect. But that these few may be properly effected, it is not necessary to continue that system of external and graduated distinctions, now in general use. The dull and sluggish, the doubtful and discouraged, better go directly to the manual drudgeries of life, than that others, many or few, should rankle with the prick of a goad, they do not need. But under the operation of this system, let it be repeated, where one of the above mentioned unfortunate natures is happily excited, two are made more inveterately stupid, or plunged into a gloomier despair.

Permit me now to propose a substitute for the objectionable principle, which may be brought, I think, to bear with no small effect on the minds and efforts of the young. I can call this substitute by no better name than **SELF-EMULATION**. Let the young be encouraged to study, from a comparison of themselves with themselves. One of the first principles developed in our nature, is the love of increasing

power. The child delights to excel himself—to do more than he has ever done before. What beaming pleasure on the countenance, when he can take a few more steps without falling, or can lift and hold with his little hands a larger and heavier article, or when he has mastered in articulation and memory another word! Now let this principle be seized on early, and used continually. When the pupil enters school, let the teacher, as far as may be, acquaint himself with his natural capacities, and with the acquisitions already made. Let a record of these be put in a book, kept for this purpose. Let this record be the starting point, from which his future progress is to be measured. Let him be made acquainted with his own condition and capabilities, and receive approbation in proportion as he shall rise above this point. Let the pupil be continually referred to his past condition, as one from which he is continually to distance himself, according to the ability naturally possessed, for this is always to be taken into the account; then, if progress be unavoidably slow, the *endeavor* will receive the commendation. In this way there need be no straining and abuse of nature, no anxiety of heart; the path of learning may be one of pleasantness and peace.

In this spirit of self-comparison and self-surpassing, there is a rivalry which can do no harm. Here, too, is a rival always present, if I may continue thus figuratively to speak. Self is always present with self. The exertions cannot be relaxed for the want of the exciting cause.

This emulation may be applied to the whole man—to moral as well as intellectual improvement. Let the moral character be always taken into the account and put on the register likewise. It has been an exceeding and very lamentable mistake, that the mental and moral education have been so separated, or rather, perhaps, that the moral has been so utterly neglected on all hands. Whoever has the charge of a young mind, should be a moral educator;

should be as well qualified in this respect as in every other ; should be as scrupulous and unweariedly assiduous in this respect as in any other. But I will defer further remark on this topic to another head of my lecture. Let me now insist that the condition and character of the whole mind be registered, from time to time, in the appropriate book. This registry is a very important particular. The remembrances of both teacher and pupil are more or less evanescent, and may be inaccurate. They may not correspond with each other, any more than business accounts which buyer and seller carry only in the memory. But black and white, which both agree upon at the time, cannot afterward be disputed. These notations strike the senses and thereby give impulse to the feelings. They are like milestones on the way, to inform how far we have come and with what speed we are moving.

In the examinations of schools and colleges, let the record be open to those appointed to examine the classes. Let them be open to the inspection of any one, and especially of the anxious relatives and interested friends of the pupil, that they may know his exact merits through the whole course. How little, how very little do parents know of the condition and character of their sons in college. As to their intellectual standing, the parts, as they are called, indicate something, but nothing very accurately. If a young man receives a low part or none at all, his confiding friends are easily made to believe that the college dispensers of honor have been unjust. But of the moral character of a son, the parents in general know absolutely nothing. They can judge only from the exhibitions of himself he makes at home. If the youth happens to receive the distinction of rustication or dismissal, it must of course be supposed that all is not right. But even these notorious tokens of disapprobation, do by no means accurately indicate the character. Sometimes the simple-

hearted and quite innocent, having been allured into some sportive enterprise, are detected and punished, although their moral character in general may be incomparably superior to many who hold the noiseless but dark and devious tenor of their way. Instances could be mentioned, in which parents have rejoiced that their sons were so diligent and orderly at the distant seminary, when at this very time, these loved and hopeful ones were among the most idle and dissolute.

Now, in the proposed registry of character, there can be no deception, no escape. At any time the scholarship and the morals may be ascertained, by making the proper reference. What if friends be mortified and the youth put to shame? Is it not better, than that his time and money be utterly thrown away, and perhaps his constitution be injured or his morals corrupted for life? But such mortification and shame will very seldom take place. The youth will understand at the threshold of the seminary, the system to be pursued and the destiny awaiting. He knows that a map of his whole character is to be drawn, as far as it is discoverable, and that this is to be open to the inspection of all, and to remain in the archives of the institution, to be traced by all his friends, and even descendants, who may enter or visit the seminary, forever afterwards. Now should the student know all this beforehand, and be continually conscious of it as he proceeds, he would, I doubt not, commence with an impulse, go on with a momentum, and close with an improvement and an honor, which would cause the venerable Alma Mater, now slumbering in her prejudices, to rejoice most heartily that she had at length awaked from her ancient repose. The instances of mortification and shame would be far less numerous than they are now, as seldom as mortifying and shameful things now come to light. I believe that self-emulation would be a very general feeling, and self-improvement the general aim and attainment.

“But this system will cost quite too much trouble. It will require a minuteness of supervision which cannot be afforded. The plan is not feasible.” In answer to this objection it may be observed, that it is more than probable that the time and money now expended in the long run, in managing the refractory, quelling rebellions, and repairing depredations, would be amply sufficient for the constant and minute supervision of the plan proposed. But if it be not so, let all pomp, show and circumstance be abolished which do not confer a greater good on our seminaries than might be obtained in some other way, at the same expense. Why shall usages be retained simply because they are usages? It is the best possible education of the greatest possible number that we want, and at the least possible cost consistent with the greatest good on the whole. Must the great and widely scattered public suffer, that the pleasant literary associations of a few may be kept fresh and not lose their hold on the heart? I have no particular objections, however, against the customary literary festivals. All I would urge, is that they had better be abolished than that such minute and particular attention should not be given to each individual as to confer on him the most thorough mental and moral education. Let the great end be kept always broad in view, and the most direct course be taken towards that end. Let the paths of education, like those of business, be straight. The people of the country in visiting the city, make the most of time and money. They do not wind along the ancient and crooked, but more verdant and flower-scented ways, they take the turnpike and the rail-road. So it should be with those they employ to educate their children. Their road should be straight; and they should adopt, moreover, whatever new and real facilities, invention may from time to time bring to light.

It may be thought that too much is expected from this *booking* of character and this self-emulation. It is replied

that these are but a part of the system ; these alone, truly may not produce the effect above anticipated. Light should be thrown on the student's way, and impulse given to his heart in connexion with these. For instance, the student should have instruction respecting his nature and destiny, such as hitherto has been very uncommon in schools and colleges. The young have generally entered and continued in these institutions as thoughtless and indeed as ignorant of the real objects of existence and ends of education, as they were of the particulars of a science which had not yet been discovered. They go to college, for instance, because custom has made a course there necessary to what are called the learned professions. Or they go to attain a respectability of standing which they could not otherwise possess.

At academies and common schools no better views, nor generally so good, could be expected to prevail. Now such are the motives with which parents send their children to the places of learning, and such are the motives with which their children go, if they go from any other motive than that they are *sent*. And are they imbued with a loftier spirit by their instructors? Most certainly not in general. Now it ought not to be thus. A child should be taught as early as he is capable, his real nature and great destiny. He should be taught that his true self is a soul and not the material, sensual and perishable body. Let him know that this is but the "house he lives in," to quote the apt language of a benefactor of youth. Make him realize that the house was made for the inmate and not the inmate for the house. Make him realize that himself, that is, this invisible but conscious soul, shall not and cannot die as the body does. Let him understand that going to school — that education has reference to a future life — to eternity as well as to time. That indeed it may make him more respectable and useful, comfortable and happy in this

life, but the principal end is the life to come. Teach him that every step forward in true knowledge, is an advance on an endless way ; that every new truth he acquires is his forever — a treasure as it were, laid up in Heaven ; and that increasing strength and facility is a preparation for, and an approach to, that ability necessary to climb the heights, gather the riches, and wear the glories of the spiritual universe. I would of course use a simpler mode of expression than this, always adapting the language to the young comprehension. Now, fill the pupil's soul and fire his aspirations, as early as possible, with these ideas, and let them glow with an increasing faith and fervency, as he shall proceed from stage to stage, and with what exceeding effect may they be brought to bear on the later periods of his education. Then the sciences of the material creation will be presented to him, in all their beautiful details and magnificent extent ; then the principles of that mind will be more clearly unfolded, by which he has dominion over the Divine works, and by which, like the Infinite Maker himself, he has a glory above the heavens. And then he cannot but feel how unworthy of himself is idleness, and how utterly beneath himself and abominable, is that sensuality into which the young man is now so prone to fall. When the young shall thus duly realize that the great end, not only of this life but of eternity, is the growth of the soul, how will self-emulation take hold of the spirit with ever-abiding and ever-impelling power. They will constantly realize that it is as much their nature and destiny to rise perpetually above their present selves, as it is to think and to feel. To catch the beautiful figure of the lecture on emulation, of last year, that ladder which the sleeping patriarch saw in his dream, will be placed before the youth without a vision ; its foot supported by earth, its summit leaning on the skies. Most truly the ladder will be before him without those evil remembrances, class emulation and

personal rivalry. He may not be unconscious of the radiant way, and active steps of ascending companions, but his intenser thoughts will be given to the beckoning angels, leaning with sweet sympathy from the heavenly verge, and to the glorious avenues that open endlessly upward and beyond.

It may be said by some, that these grand views of the soul and its destiny, are already inculcated in the religious instructions of the Sabbath. It may be so, but this is not enough; this instruction has but little effect. Preaching is formal and periodical, and always expected. And it is generally too abstract and loftily rhetorical — too far away from common thoughts, associations, and pursuits. Oh no! it is not to the Sabbath-day preacher that only or principally belongs the work of making the youth realize that he is studying for eternity. It is the duty of his daily instructors. The idea must be impressed in connexion with the exercises by which the youth feels that he is growing stronger and greater. It should be presented incidentally and unexpectedly, and not formally and merely on anticipated occasions. Let not the instructor sit up like an automaton, and in heartless dignity put question after question in respect to the ideas, or what is too often the case, the mere words of the text book, with about as much animation and seeming interest as the time-piece on the desk before him, which ticks the moments, and tells the end of the uncomfortable and spiritless hour. Oh no! but let him show that he really possesses a *living soul*, and one that feels a tender sympathy for the living souls around. Let him act the father or the brother, and mingle affectionate conversation with his questions and instructions. Let there be a cheerful ease and familiarity; then while his pupils feel an intense pleasure in the acquisition of knowledge and the play of their faculties, drop the suggestion, breathe into them the faith, that this acquisition and mental action are to

bear eternal process and an eternal and deepening delight. In respect to self-emulation, there is another important advantage. The kind and animating sympathies of classmates are not put to flight, as in the case of the other kind of emulation. A scholar cannot possibly desire to be excelled by another, but he can most heartily desire that another may excel his own self. Indeed the self-emulation may be excited to greater intensity by the sympathetic interest of companions. There is not necessarily any opposing feeling, any food for envy. There is no invidious deference to natural talents, to the neglect and dishonor of inferior capacities. On the contrary, the humble mind will be as much an object of friendly interest as the richly gifted, provided that a good heart and an aspiring will go with it. That there may be a sympathy of one with another and a mutual aid, let the precise condition and character of each, as put on the register, be known to all. Let each one be made to stand out before all the rest in his true intellectual proportions, and with all the lights and shades of his moral character distinctly perceived. Then every one who shall burn with the desire to grow in intellect or wax purer in heart and habits, cannot but receive the well wishes, the plaudits and the respect of his fellows. And his clearly observed example, moreover, cannot but incite to imitation. Each one will catch light and zeal from every other one, to aid him on his self-triumphant course.

But self-emulation is not the only, nor the noblest feeling to which we may safely appeal. I believe that the highest and purest moral principles may be brought to influence the mind in its education, and this with an effect not now generally conceived possible. Let us begin with benevolence. This is one of the first principles that should be cultivated, and it must be cultivated or it will not certainly be possessed to that extent which was designed. Human nature is selfish, particularly at first, from the very constitu-

tion with which it starts on the course of life. Benevolence must therefore be assiduously cherished from without ; it has not sufficient innate and instinctive strength like the selfish principles. From the earliest age, let the doing of good and the making of others happy, be set before the child not so much in words, as in actions ; let him see the beauty and feel the power of benevolent example. Present him continual opportunities of realizing the happiness of conferring pleasure on others. Let him be brought up to have nothing done for him which he can as well do for himself, thereby saving others the trouble. From his earliest ability, habituate him to be useful, and to feel himself fortunate and happy to be useful. Let him delight to take care of, and instruct his younger brothers and sisters. Especially, let him realize the great good his own perfect example would do them. As his mind enlarges with knowledge, let it also expand with large and comprehensive schemes of philanthropy toward a community, a country, a world. I repeat it, let this feeling be early developed, and constantly deepened and strengthened by careful cultivation, and it may be made a powerful incitement to study. If the benevolent child finds that he can benefit a younger child by imparting to him his own acquisitions, he will be induced to increase these acquisitions. He will know that the greater his own application, the more he can gratify that kindness which blesses the giver even more than the receiver. He will realize also that the good he may do in distant manhood will essentially depend on the discipline and acquirements of his education. I see not why the feeling thus early developed, may not accompany the scholar through the whole course with an increasing power.

In this connexion I would inquire, whether the system of mutual instruction might not be partially adopted with a success not generally apprehended. The human mind is essentially active ; it likes not only to acquire and receive,

but it likes, or it may be taught to like to communicate. It is pleased in producing effect, in shedding an influence abroad upon others. Let this principle be seized on and turned to happy advantage. Let the scholar receive but to communicate, grow strong but to impart strength. All whose business it has been at any time to teach, know with how much greater interest they have reviewed old acquisitions, and also sought after new, than ever before, on being called on to impart of their stores to others. Their faculties put forth with an energy, and grasped and held with a success, they seldom experienced when usefulness was seen only in the distance. Why then shall not the learner at school, have the advantage of being a teacher at the same time?

I am aware that there are strong objections to the system in the minds of many ; but do not these objections arise from difficulties that may be removed by a better organization of schools, and by the introduction of better motives and a better spirit into the scholar's mind ? In the first place, let the art of communication be considered one of the great and important aims in education. Certainly the ability to impart one's ideas to others is of the highest use in life, and is the source of a very large portion of our social happiness. But how few there are who possess this ability in much perfection, for the lack of early and continued training. Let the pupil then as early as possible, be taught to communicate what he has received, and as far as practicable for the benefit of others. Let him do it with a feeling of benevolence as well as in obedience to regulation. Let the smiling air and bland manners of the companion appear, instead of the haughty and domineering demeanor of the monitor. Moreover, let that great moral principle, conscience, of which I shall soon speak, be made early, continually, and faithfully to do its office, and I think that the objections to mutual instruction will be far less than the

advantages. All must perceive how it would strengthen the motives to diligence in study. It will permit large scope to some of the most interesting principles of our nature — for instance, the love of effect towards and influence over others, as mentioned before, and besides this the desire of doing good, and still further, the desire of the affections of others, for no one can impart to another in a proper spirit without receiving in return a portion of the recipient's heart.

Let us now ascend still higher in the scale of moral cultivation. Let us bring the principle of conscience to bear on the efforts to juvenile improvement. This the crowning feeling, the queen of all the human principles, must not certainly be neglected. But hitherto how has it been neglected in the education of the young. They have indeed been generally taught not to violate the commands of God in great and very prominent instances, to hold sacred and unbroken at least the ten commandments; but conscience has not been generally educated to sit in judgment on the thousand little actions and words, dispositions and motives, which really make up and indicate the character. Let the child be early and deeply impressed with the idea, that the laws of God extend to the minuteness of character. Let him feel that he must religiously refrain from every, even the very least, action, word, tone, or look that needlessly produces unpleasant feelings in another. Let him be taught that it is not only his pleasure but his *duty*, to contribute as far as is possible, to the happiness of others. Let him be habituated — let exceeding care be taken that he should be habituated — to obey the dictates of conscience implicitly and instantaneously. Let him feel that this inward voice is as much to be heeded as would be the voice of God in intelligible words from the opening heavens. Thus, if the small things of character are brought under the cognizance of conscience, the greater of course, cannot but be subjected to the same authority.

But what has all this to do with the motives to attention ? It has much to do with them, as I think will easily appear. If conscience is rendered sensitive and authoritative to the extent suggested, it will certainly require of the child and youth, that he most scrupulously improve his time and opportunities for cultivating those faculties by which he is to be happy and to make others happy. And indeed, let special address be made to conscience in respect to study, and this principle, so sensitive, watchful, and peremptory on other points, cannot but do its proper office on this. The waste of time, the abuse of privileges, and the neglect of the immortal mind, will appear to the scholar with the hideous aspect of sin, from which his moral nature will shrink, resolving that it shall not be.

Let a deep self-reverence be generated in the young. As they shall be able to receive it, let them realize that their minds come directly from the holy inspiration of God ; that they are as it were, the miniature image of God, which education shall expand into a more and more perceptible and glorious likeness of the Divine Original. We can hardly convey too exalted a sentiment in regard to the god-like nature and destiny of the soul ; for the utmost stretch of imagination cannot surpass the truth. Let the young be early and abidingly penetrated with the sentiment, and it will be as a good angel, strengthening them against temptation and aiding them onward.

Let none say that this is mere speculation and fancy. Argue not against it from the present moral aspect of the world. History tells me that the young Spartan was trained to steal, and then to meet death through excruciating torture rather than incur discovery and disgrace. The Hindoo will fling himself beneath the crushing wheels of his idol, and the widow of the same nation will lie down to consume on the funeral pyre of her husband, impelled by a superstition, perfectly at war with common sense. The

Indian exercises an exulting fortitude as he slowly burns at the stake. Innumerable facts teach me the abiding power of early and assiduous training. Now, when I know all this, I have the hope, the faith, indeed the certainty, that the moral nature of man may be made pure and strong by right religious influences, to a degree, hitherto unrealized and hardly imagined. The great power of Christian motives, seasonably and properly instilled, has not yet in general, been experienced. Let not this power be doubted till it shall have been tried. I rejoice that the bearing which moral education has upon intellectual, is beginning to be understood. It is notorious how this has been almost altogether neglected in our seminaries. Now let the truth be spread abroad, that the heart must be taken care of first. In the earlier years, let time be taken to watch every indication of the affections. Make use of every available incident for moral improvement. Let the chief concern be the care of the feelings, and the spare moments be given to the understanding, instead of the reverse, as has been the case, and before the close of the educational course, it will be found that the understanding has not been a loser. Purify the moral atmosphere from the elements of obscurity and storm, and the eagle intellect will instinctively soar on high, seeking the source of light.

Before leaving the subject, there is one more consideration to be mentioned, and this of exceeding importance toward fixing the attention of the young. It is that the attention of the teacher be given — intensely given, to his work. How seldom has this been the case in the past. Study has not been more irksome to the learner than the direction of that study has been to the teacher. His exertions have been forced and mechanical, like those of the pupil. And who can blame him for disgust at his occupation, when it was to teach words without the meaning, rules without their application ; and when he felt himself obliged

to resist the impulses of young and innocent nature. No wonder that temporary necessity alone drove so many of the younger, and fastened so many of the older, to the employment. But the age so hard both to teacher and taught — *iron* indeed it has been — is now passing away ; the golden era of education has dawned ; blessed auspices are brightening around. The educator is no longer to be a whip-holding task-master — a daily prison-keeper, hateful to the eyes of his charge. The new philosophy of education that is prevailing, will change the whole aspect of the vocation. The teacher's toil will become a pleasure. If there is any employment into which the whole mind and heart and strength may be put, it is that which directly operates on the immortal soul ; that which makes this soul continually sensible of an increasing capacity to receive, and an increasing power to confer happiness.

The vocation of the instructor is an everlasting vocation. I see not why the relation between the teacher and the taught may not exist in heaven and through eternity, though not between the same individuals perhaps as here on earth. It is altogether rational to suppose that the social felicities of the future, may in part arise from the communication of knowledge, by the more advanced to the less. Now the duties of a vocation more heaven-like than any other here below, rightly performed, must be as full of interest and pleasure as any duties whatever, given mortal man to perform. Surely, if the teacher feels this, as he must feel it, is he true to his calling, the interest that will kindle in his features, flow from his tongue, and which will possess and inspire the whole man, will pass into his quickly sympathizing pupils. Let the fervent spirit of a loved instructor be breathed toward, be poured upon, the young and opening soul, and it *will* be received.

But before this mutual happiness can be realized, much is to be done. Our schools in general are to be remodelled.

And the public mind is to be enlightened, that this remodelling may not be opposed and delayed by blind prejudice. The instructor must diligently aid in diffusing light. Let him not wait till knowledge shall happen, by accident or in the long course of things, to fall into the possession of his patrons. Let him go after it, and carry it to them, and *insinuate* it upon them. If need be, let him set his face boldly against a multitude, and dare to lift up a solitary voice — and great shall be his reward. O let him not proceed tamely, in the old track, because habit may have made it mechanically easy, or for the fear that a departure may displease ignorant employers and put in some jeopardy his livelihood. What! I would say to such a one, what! would you keep your own out-putting, up-going, and glorious nature subdued to the semblance of a machine, whose operation is to subdue similar natures to be similar machines, and all to go round and round together at the same unvarying pace, and with the same unvarying creak and clatter? You a man and an immortal, and do this, when you might be aiding the young soul to unfold its arch-angelic wings, and teaching it to soar toward its destined heaven! I have not language whereby to express the dishonor you do your vocation — the degradation in which you hold yourself. Go, go, you have mistaken your work and your place. Your work is to handle and weigh and measure gross, dead matter; your place is where the music you most love, the clink of coin or the rustle of its representative, may daily rejoice your ear. The heaven-born and heaven-destined soul is not for you to come near as a director and an example.

Indeed, no one should engage in education with merely mercenary motives. Like the religious teacher, the educator of the young has the care of souls. He should engage with motives such as the soul's infinite destiny should naturally inspire. The image of the holy God is committed

to his keeping ; unclean hands will soil it, careless hands will permit it to be soiled.

One should become an educator, because he is peculiarly fitted for the work, and because he loves the work. He should not consider the material emolument as his principal reward. He should find this rather in the expansion, given by his vocation to his own nature ; in that lofty benevolence which delights to make others more wise and pure and blest ; in those overflowing measures of gratitude, which cannot but be poured back into his own bosom by the happy recipients of good. It is, moreover, given to him to rejoice in the hope that the friendships, formed here between him and his pupils, may continue into the future and make a portion of heavenly felicity. Finally, he is permitted to behold, with the eye of faith, the approving smiles of those guardian angels of the young, who ever behold the face of their Father in Heaven. Verily, great, great is his reward.

LECTURE II.

ON THE
IMPROVEMENT WHICH MAY BE MADE
IN THE
CONDITION OF COMMON SCHOOLS.

By STEPHEN FARLEY.

IMPROVEMENT OF COMMON SCHOOLS.

It is needless, before this audience, to enter on any detail of evidences to prove it to be matter of paramount importance to the community, that the condition of our common schools should be healthful and prosperous. It is from them that the great mass of our population derive whatever of that precious article called *learning*, it is their lot in life, ever to possess. And the intimate connexion between popular knowledge and the permanence of our free institutions, civil and religious, is so generally understood, that it would be superfluous, on the present occasion, to attempt either to confirm, or illustrate, the doctrine of it. An enlightened mind cannot, for a moment doubt, that, were our common schools to cease, our national character would inevitably and rapidly degenerate; that we should soon be dispossessed of that proud eminence, in regard to popular privilege and moral strength, for which we have, hitherto, been happily distinguished from other great communities of mankind.

The subject itself of this lecture, seems to assume the fact that our common schools are *not* in the best condition, and that we have the power of ameliorating them. And if the case be truly such, it is a serious one, and demands speedy and earnest attention. For where the power of

amelioration *exists*, it is important that, without delay, it be brought into exercise.

We propose three inquiries —

1. What is the existing condition of the schools, and what are the defects of it?

2. What broad measure can be taken with a view to improve it?

3. By what means may this measure and others, be greatly facilitated, set in operation, and rendered efficient?

What then *is* the condition of the schools, and under what defects are they laboring? *The common schools provided for and supported by the laws of the State*, and more especially those *in the country towns*, are the ones we now have in view. These, perhaps, constitute nine-tenths of the whole; and they are the schools whose condition so much needs to be improved. The public schools, in this city of Boston, are, we believe now, and have long been, comparatively in a prosperous state; approaching toward *what they ought to be*; and what all schools should be throughout the country. This may also be the fact in regard to the towns of Salem, Newburyport, Lowell, Portsmouth, Portland, Hartford, New Haven, &c. But the great mass of the population is without the limits of the great towns, and the condition of the schools in them, furnishes no example from which we can judge of it, in the country at large.

We will not, on this head, speak positively, but in the way of hypothesis. Suppose, then, that the case is as follows: That every district school in New England is kept for the term of one quarter, every year, by a master; and for another term, of the same length, by a mistress: That the teachers are exchanged every year; so that each one instead of following up *a course* previously commenced, is under the necessity of instituting a new one, suited well or ill to existing circumstances; that the arrangement of

the school devolves entirely on the teacher, being, from necessity, the product solely of his, or her judgment, experience, and talent, be these what they may. The teacher is compelled to rely wholly upon his individual strength for the regulation, government, and success of the school, whether he be competent for it, or otherwise. Suppose that, in the article of government, there are, every year, many failures ; some in every town, more or less entire ; it being an obvious fact that this has now become a far more difficult thing than it was, half a century ago, when every child, as soon as it could speak plainly and walk alone, was taught with the utmost gravity, to say Yes, Sir ; Yes, Ma'am ; pronouncing the title with an emphasis ; and to make obeisance to every man and woman it should meet in the public ways ; when the sentiment of reverence toward its superiors was so early and deeply implanted, that it was believed to be a natural instinct ; whereas, now it is one of the hardest tasks to effect its being implanted in the minds of youth ; a prevalent impatience of restraint and a kind of wild libertinism, seeming to have seized the minds of the rising generation. Suppose further, that in consequence of the many failures in the article of government, it has become a fact that the teacher's reputation and competence for his work, have come to depend chiefly on that one thing, and to it, of course, his attention is chiefly directed. That his anxiety and endeavors are, to sustain his own proper authority as master, and to have what will be accounted a well-governed school ; and this he knows he cannot have, without the greatest assiduity and bestowing upon it the principal part of his time. So that the business of instruction becomes one of only secondary consideration, and perhaps little in that line is accomplished. That when the committee visit the school, they come as mere lookers on, nothing of the character of a proper inspection or examination is gone into ; it is only

an exhibition ; and if the scholars conduct properly, and read and rehearse flippantly what they have read and conned, and repeated scores of times before, the whole passes off well, the school is applauded, and the master, having acquitted himself to satisfaction, retires, as the cant phrase is, with flying colors. And yet, perhaps, he has done as well as the circumstances of his situation admitted, though his pupils may have been advanced but a very short distance in the road to learning.

Suppose, moreover, that, in a great part of the schools, there is a sad deficiency of proper books ; one of the preceding masters having exerted himself, with some success, to introduce one kind of books, and another master a different kind ; and a third some other kind ; and it is now necessary to class the scholars, not according to their standing, but according to the kind of books with which they happen to be furnished. That, in addition, the master finds the habits of many of the older scholars utterly averse from the studies and the course upon which he wishes to put them ; they have ciphered through their arithmetic, but never attended to geography, or grammar, or philosophy, or history, nor are they willing to do it. And they have not the proper books, nor can the master cause them to be procured. Let all these things be supposed, and the supposition will not, we fear, differ much from the reality ; for it has not been our intention to fabricate a caricature, but to exhibit a fact. If the representation be not exactly true, it is, generally considered, far more just than our hearts could wish it were.

The defects are various. Many schools are badly governed. Others are poorly instructed ; not so much from incapacity in the master, as for want of time. He cannot attend to two things at once, and do justice to both. Sometimes a teacher is obtained who will surmount the difficulties of his place, and have a well-governed, and a

well-instructed school. Such, however, are rare instances. We cannot find a supply of teachers from that description of persons, whom nature has peculiarly gifted for the task of controlling the minds, and winning the affections of the young.

It is a great defect in our schools, that the course of studies in them, is so irregular and disjointed. One course, so far as it can be so named, is adopted this year, and a different course the next. It is a great disadvantage, that one master cannot begin where the preceding one left off; that there cannot be a systematic course pursued from year to year, in constant succession.

Too much responsibility devolves on the teacher. He needs a support which he does not find. An Aaron and a Hur should be at his side, and stay up his hands. Nor will the condition of our school establishment be essentially improved until some aid of this description be furnished. A more adequate provision must be made, for the conduct and supervision of the schools. They cannot be prosperous until the mode of regulating them be more competent; till they be better supervised.

It is unavailing to complain of inadequate pecuniary support. Let this be augmented two fold or three fold, it will not radically change the character of the schools.

Nor is it in point, to complain of the literary incompetency of teachers. The best method of removing this evil, is, to improve the condition of the school establishment. If this be caused to rise, the scale of knowledge, among instructors, will of course, rise with it. But the literary competency of instructors will not, of itself, secure a healthful habit to our schools. A man who is qualified to teach and manage a high school, composed of orderly scholars, with good success, may utterly fail in attempting to *keep* a common one. For if he is under the necessity of exerting incessantly every faculty of his nature, to govern

the school ; if there is an untiring struggle between him and the scholars, to determine which shall have the ascendancy, he or they ; what great good can it be expected, he will accomplish ? And for what he does, he will probably have no credit. The whole district look on, and a great part of them, as indifferent spectators. They in effect, say to him, " Here are our boys and girls ; take them as they are ; if you can tame and manage them, we are satisfied ; if not, you are a *poor concern* ; whatever be your learning or fidelity, you are not fit to have the charge of our school."

But this master is not content with the mere management of his scholars. He began with a higher view ; he wishes to benefit them. He wears down his strength in endeavors to promote their progress in useful knowledge, for this was his ultimate end. But it is casting pearls before swine. His scholars are daily contriving artifices to vex him and to thwart his designs. And those who should assist him, are amused, and laugh at the tricks played off by the rogues, and thus the parents throw their influence against the master, instead of casting it, as they ought, in his favor.

The defects of school government are more easily perceived than those of instruction. If a man effectually contrive to maintain subordination among his pupils, the defects of training them in learning, are generally out of sight. But if his authority be disrespected, no amends are allowed for what he has meritoriously done, in the way of instruction.

We come to the consideration of our second inquiry : Is there any broad measure, which, if adopted and ably pursued, will be found a salutary remedy ? We believe there is. We want a requisite, an enlightened, an efficient supervision of the schools. Every public school ought to be under the supervision of a committee or board, composed of men who understand the duties of their office, and

are competent to a successful discharge of them. This is the proper measure or means for improving the state of the schools. Begin the work with providing an adequate supervision. And this means is very simple — simple as the laws of nature. And it is no innovation. It is a means which has long been tried, and tried with success. The high seminaries of learning, in all countries, have ever been under the direction of a board of supervision. They could not have stood without being planted on this foundation. And the public schools, in the great towns of New England, are regulated on this very principle. The master is not the unlucky and the unwilling despot of the school. He acts agreeably to prescription. He presides under a constitution. The general regulations emanate from a higher source. He is supported efficiently by an arm which is always near, though not always actually present and visible. He has his course marked out, and knows what it is expected he will do, and on what he can rely. But it is not expected of him that he should produce the full tale of brick without being supplied with both the clay and the fuel. And these schools are found to answer their purpose. They are vineyards which yield much good fruit. And we repeat it, all our schools should be placed on the same foundation. And it requires nothing great, either of expense, or of time, or of labor, could the work be rightly commenced and followed, to set them on this foundation. And the sooner it is done the happier. It is, we conceive, the only foundation that will support the edifice. Let this foundation be laid, and ere long the top stone will be carried up; and it will go up with shoutings and with blessings. It may, by some, be thought an inevitable and insuperable difficulty in the way of the proper execution of the plan now proposed, that there would be a deficiency of the requisite materials from which to constitute the committee of supervision. Many of the towns, it may be said,

do not contain men of adequate information and talent to enable them to act efficiently in such a place. And some who are capable of it, would not be willing to accept the office. The committees, of course, would be incompetent ; the plan could not be carried into effective operation, and the whole design would prove abortive.

In answer to this objection, we remark, that there is, we conceive, no necessity that all the members of the school committee should be inhabitants of that town for which they serve, and by which they are appointed. The committee may in part, be taken from other towns in the vicinity. Acting on this principle, no town need be destitute of a competent committee. Though it cause some additional expense, yet it would be inconsiderable, and by no means onerous.

But even this uncommon measure, we conceive, will not need to be adopted, in many instances, if indeed in any. The facilities furnished by the means, of which we shall soon make a suggestion, will, we believe, in a great measure surmount this difficulty, and render the work comparatively easy. The committees, in the towns generally, will not have a new course to strike out for themselves ; it will be sufficient for them to copy (with suitable alteration as the circumstances of the places vary), and to follow, the examples of the larger towns who shall have commenced their course, and gone ahead. And the doing of this, will not require any great literary qualification. It may be done by men of good understanding, of some experience and business talent, though they be not students or philosophers.

We have now briefly suggested one fundamental measure, which, when carried out into its proper details and execution, could not, unless we exceedingly misjudge, fail of being a happy means of raising the character, and augmenting the usefulness of our common schools.

In regard to details, we have not time to speak minutely. Whether any new enactment by the Legislature be requisite, we are not able to say. We presume not, however, in this State of Massachusetts; the statutes make provision for a school committee. This committee, we conceive, have power to prescribe the general regulations of the schools, to determine what books shall be used, what studies may be pursued, what course shall be followed, and what kind of penalties may be inflicted. They can dismiss a teacher, if they see adequate cause, and can exclude from school those scholars who will not come under requisite subordination. The committees, however, do not generally take upon themselves all the functions of this office. They visit the schools, but they do not regulate them, nor examine them, nor afford the teacher any real assistance. Their visitations effect little benefit. Speaking generally, we venture to say, they do no good. But they might do much good, if they would assume their proper responsibility and rank. And it is upon them, we greatly depend, to ameliorate the character of our schools.

We proposed, in the third place, to inquire, by what means the general measure, just proposed, and others may be efficiently facilitated, set in operation, and rendered successful? Our answer is in general terms; it may be done by means of tracts; by publications, perhaps, chiefly emanating from this Institute of Instruction; furnishing information and counsels on the subject of schools; the protocols of plans for conducting them, adopted in the larger towns, and "now in the tide of successful experiment"; containing lectures, extracts and synopses of lectures, annually delivered before this Institute of Instruction; and let these be sent into every district in the Commonwealth. By this means, the bright lights which shine within these walls, the atmosphere which is here

breathed, and which are in a manner, confined to the area of this house, might be expanded, enjoyed, and breathed, in every section of New England, and beyond it. By this means, public sentiment would be enlightened ; attention would be excited ; those whose part it is to act, would be informed both of what they are to do, and how it should be done. The whole concern might thus be rendered practicable and effective.

But how shall the expense of these publications be defrayed ? For if they were merely thrown into the market, they would not be circulated and read so extensively as the cause, which they are designed to support, evidently requires.

Would not the Legislature of the State, if the subject were properly brought before it, make an appropriation sufficient to cover this expense ? The requisite sum would not be large. One thousand dollars would probably be adequate. This sum would not be more than half of one per cent upon the amount of the moneys now assessed, by tax, for the support of the public schools. The sum actually raised for this purpose, we will say, is two hundred thousand dollars. It may be more. And it may be that one half of that sum, under an improved method of conducting and supervising the schools, would secure all the learning, and consequently effect all the benefit, now derived from the whole ; and of course, that the money, now expended, might be rendered the means of accomplishing twice told the good, that is now realized from it. Assuming this hypothesis, there could be no question as to the expediency of making such an appropriation. For there can be but one opinion concerning the good policy of paying a premium of half of one per cent, in order to double the amount of a great and important yearly revenue.

Nor let it be said, that all this calculation is totally wild

and imaginary. There is nothing in it incompatible with known facts ; nothing irreconcilable with our past experience. And we believe there is nothing improbable. All of us have known schools, and perhaps we see them, every year, which have been of no value. The money expended for the support of them was scarcely anything short of absolute waste. The master received his wages, and he may have earned them very hard too, but his employers and pupils received no equivalent. Some such schools there are. And notwithstanding that those which are totally useless, may not be very numerous, yet those which are far less useful than schools ought to be, are numerous indeed. And who of us is able safely to deny that the general loss, throughout this Commonwealth, is less than one half of what is expended ? It is true that on a subject of this description, we cannot arrive at a mathematical estimate. But the fact is manifest to all acquainted with the general condition of the public schools, that a very great proportion of them, are conducted upon a plan so defective and disadvantageous, that much of the really practicable profit expected from them, is not received, but is utterly foregone.

We wish the times to come, when this State, and when all the States in the American Union, shall have, as an organ of their government, a board of education, whose office it will be, to open and hold a correspondence on the subject belonging to their department, to consult, devise, and make report of needful and promising measures for sustaining and improving the means of popular knowledge and general education. The times, when every teacher employed to take the charge of a school, shall have his work, as far as this can be done, distinctly laid out before him ; when he shall be caused to understand that he will be duly sustained in carrying into effect all the prescribed regulations of the school, and that if he fail to fulfil the

injunctions, laid upon him, he will be dismissed from employment ; when the scholars, also, at the commencement of the term, shall be made to understand what is expected from them, and impressed with the conviction that they must conform to all the laws of the school, or be excluded from enjoying the privileges of it ; when the committees shall visit schools for the purpose of real inspection, to ascertain whether the instituted regulations are properly observed, both on the part of the teacher and the pupils — to see if the school be in a well-conducted and prosperous condition ; — these times, when they shall have arrived, will resemble “ the times of restitution ” ; knowledge will increase ; wisdom and science be more and more, ‘ the stability of our times.’ ”

LECTURE III.

THE

DUTIES OF PARENTS,

IN REGARD TO

THE SCHOOLS WHERE THEIR CHILDREN

ARE INSTRUCTED.

By JACOB ABBOTT.

DUTIES OF PARENTS.

THE duties which devolve upon parents, in reference to the schools where their children are to be educated, commence with the first arrangements of securing a teacher. The duty of selecting and engaging a teacher is usually assigned, it is true, to a committee; but in a country so thoroughly republican as ours is, such a committee will almost always act in accordance with what they suppose to be the public voice. If, therefore, in their daily intercourse with the various parents from whom they receive their commission to act, they see indications of indifference, or hear remarks implying that close economy is the main thing to be consulted, it will make an impression upon them which will have great influence when they come together to act. On the other hand, if the several members of such a committee perceive that the community feel a special interest in the business, that they are ready to sustain them in effectual measures, and that parents are all looking forward with interest to their decision, and to the arrangements which they are to be the means of carrying into effect, they will be animated and encouraged. They will feel that their duties are of some importance, and that they are felt to be of importance by the community around them, and they will accordingly be more circumspect, more cautious, and more efficient in every step they take.

A committee, in such a country as ours, generally possess far less real power than is usually supposed. It is public sentiment which really decides; the individuals commissioned to act in behalf of the community, cannot go much beyond this public sentiment, nor can they safely fall far short of it. In fact, committees are chosen generally with reference not so much to the particular knowledge they may have in regard to the nature of the business to be entrusted to them, as to their knowledge of the circumstances and views of their constituents. To these circumstances and to these views they are justly expected to conform; so that actual measures in respect to all such subjects as these, are really controlled by public opinion.

I. Allow us to say, then, to the parents whom this address may reach, that the first duty which you have to discharge in respect to the school, is to feel yourselves, and to do what you can to awaken in others, an interest in it before it is commenced. Converse about it with one another. Assist in making inquiries in respect to a teacher, and show, by the spirit and interest with which you enter into the plan, that you feel it to be of great importance, and that you are ready to sustain any proper efforts for securing the full advantage which the system of public instruction, under the most favorable circumstances, is able to confer. Thus you give the cause an impulse at the outset. The committee perceive that their action is attracting notice, and is felt to be of importance, and consequently their interest and vigilance are very much increased. Better arrangements are made; they look over a wider field, and make a better selection of a teacher. The teacher perceives, both by the tone of the correspondence, and by the aspect which affairs present on his arrival in the district or village, that the whole community are interested in his work. He has not come to his new station of duty to go through a mere routine, in which nobody is interested, and

which he may therefore perform in the dark, with indolence and carelessness. His own interest in his work is quickened by the friendly interest on the part of others, which he sees all around him ; and the importance which he sees is attached to his labors by his patrons magnifies their importance in his own view. This will not only tend to make him industrious and faithful, but it will make his work a pleasure. We all like to do what the community are interested in seeing us do, and there is nothing like being the objects of friendly observation, to animate and quicken and cheer every species of human toil.

II. Make proper efforts, and be willing to incur the necessary expense, to secure the best teacher whom you can obtain. In the selection of a teacher, there is very frequently a great mistake made in overlooking the most important qualification ; we mean interest in the young. If a man reads well, and writes a handsome hand, and has made good progress in arithmetic ; and if he is gentlemanly in his person and manners, and of good character, many a committee would consider his qualifications complete. Many such men have been employed, and have failed utterly in their attempts at teaching and governing their pupils. The committee cannot understand what the difficulty is. The first line on the pages in the boys' writing-books, looks like copperplate ;—but all the others continue, week after week, as bad as they ever were. The master can solve at once all the hard problems which the older boys bring him, by way of testing his skill, but yet, some how or other, that row of little boys who were entangled in the mysteries of simple division when he came, are just as much entangled still. There is little improvement in reading ;—little order, though there is great severity,—and every few weeks the whole neighborhood is thrown into excitement by the occurrence of some difficulty between the teacher and a scholar,—the parents and their

friends insisting that the master is partial, unjust, and cruel, and the master as firmly maintaining that the boy has the most obstinate and sullen temper which he ever had anything to do with. Thus between the scholarship of the teacher and the ignorance and frailty of his pupils, there is a great chasm, which interest and affection only could close, and, unhappily, there is no interest or affection to close it.

But you will ask, how can we know whether any particular teacher possesses, in addition to the proper literary qualifications, this interest in the young, so necessary to success? You cannot tell until he has been tried. If the candidate who offers himself for your school, has been a teacher before, spare no trouble and expense in ascertaining what was his actual success in securing the progress of his pupils, his own ascendancy over them, their good will, and a spirit of subordination and quietness within his jurisdiction. If you find that in these particulars he has been successful on actual trial, especially if you find proofs of his having taken a pride and a pleasure in the discharge of his duties, and a personal interest in the pupils committed to his care, spare no expense in securing his services. No money is so well expended as that which is made really to tell upon the moral and intellectual improvement of your children. Many a man who has neglected their interests when they were young, in order that he might save money, or gain money, would gladly in his old age give up all the land, or the bank stock which he had thus acquired, if he could, by that means, repair the injury caused by his neglect, and instead of being harassed by the evil deeds of a wild, vicious, and abandoned man, who was once his child, could be cheered and sustained in his old age, by an industrious, virtuous, and dutiful son. No;—spare no expense, which can be made really to tell upon the moral and intellectual improvement of your children.

III. You can co-operate very powerfully with the teacher whom you shall employ, by taking an interest in his plans and labors, after he shall enter upon his work. In order to do this effectually, consider his difficulties, and the trying nature of the responsibilities which devolve upon him. You yourselves often get out of patience with your children, though there are perhaps but half a dozen under your care, while he has half a hundred. You have only to govern them ; he has to govern the whole multitude, and to carry all the individuals forward in their studies at the same time. You are accountable to no human power for your management of your family, but he is responsible to many parents ; there are urged upon him from time to time, many wishes, various and conflicting, and he finds all around him expectations which it is impossible to fulfil. Parents should consider these things as the inevitable difficulties and trials of the teacher's lot, and do all in their power, by the sympathy and the interest they feel for him, to mitigate or remove them.

It is very decidedly for the interest of parents to do all they can to make the teacher's situation agreeable to him, for this reason, viz., his success will depend more upon the pleasure he feels in his work than upon almost anything besides. Teaching and governing your children is not a mechanical business whose duties are well defined and explicit, so that you can secure the successful performance of them by the cold compulsion of a contract. A spirit of mutual interest and good will, makes any business go smoothly, but it is almost absolutely indispensable to secure success in a work in which the heart is so much concerned, as in the business of teaching. If you have agreed with a man to frame a house, or to get in a certain quantity of hay, or to collect a debt, or to build a bridge, it will make comparatively little difference whether you take any special interest in the manner in which he does it or not. It will make *comparatively* little difference,

for these employments are of such a nature, that a man of ordinary fidelity may be bound by a simple agreement to attend to them properly, and he will perhaps, in most cases, attend to them properly, if left to himself. There is a certain standard of faithfulness, well defined and well understood, up to which any man of good character will come almost of course, and beyond which he cannot go very far, whatever may be the interest he may take in his labor. But if you employ a man to write a Lyceum lecture, the nature of the case is totally different. If he is a man of good character, he will devote a fair proportion of time and attention to it, but above the point to which his general character for fidelity will carry him, there is room for him to rise indefinitely, according as *your* interest in what he is doing shall awaken and invigorate his. In other words, if a faithful man is executing some mechanical labor, by friendly observation, and interest in his work, you may lead him to do a *little better*, but in intellectual or moral efforts you may lead him to do *twice or three times as well*. If, while a man is mowing, his neighbors come and look over him, his efforts and success will be increased perhaps five or ten per cent; but if he is writing an oration, and knows that the community are waiting with interest for its delivery, it will increase the spirit and success of his effort a hundred or five hundred per cent. In all business, then, you may quicken the energies of those who are performing it, by friendly observation, but in business in which the feelings or the intellect are concerned, you may double or treble them. An intelligent congregation might almost make a dull minister eloquent, by the application of this simple principle. Let them all come to church punctually, — look the preacher full in the face while he is speaking, — and make his sermon and the sentiments it contains, the subject of friendly conversation during the week. The mind of the preacher would

soon feel the impulse. He would see that himself and his performances were brought out into day, and thus the action of minds around him would quicken and invigorate his own.

The influence and the benefit of such friendly observation, are much more powerful and immediate in the case of the teacher than in any other. But let it be remembered, that by friendly observation we do not mean watching the school to discover faults, nor attempting to interfere in its management by advice, and proposals of new plans, or modifications of existing arrangements. This may be right sometimes, though seldom ; and at any rate, such an influence is not what we refer to here. It is *friendly observation*, — taking an interest in the plans adopted, visiting the school, — observing its good points, and sustaining and strengthening the teacher's hands.

IV. Submit cheerfully to the necessary arrangements of the school, which are required for the general good. When fifty families unite to support a school, each must submit to some inconveniences in order to secure the greatest good to all. In classifying scholars, one must be put a little higher, and another a little lower than they might go, were it not for the necessity of classification. In the same manner, rules and regulations, adapted to the general state of things in a school, must be more strict than would be necessary for some of the older and better scholars, and perhaps not as strict as would be desirable for some others. It is the greatest good of the greatest number, which is really to be aimed at in the organization and management of the school.

Whenever parents find fault with the manner in which their own children are classed and taught, and the degree of attention which is paid to them, they almost always overrate the proportion of time and attention to which

they are justly entitled. The following dialogue, not wholly imaginary, will put this in a clear light.

A lady knocked at the door of a school-room and asked to see the master. He came to the door and the following conversation ensued.

Mother. I have been wanting to see you, sir, about George. I do not think he is in the right class in Geography; he has been over that little Geography once, and I do not see the use in his studying it any more. So I have bought him a Worcester's Geography and should like to have him study that.

Teacher. But we have no class in Worcester's Geography.

Mother. Have you not? Have you not any other class in Geography besides the one he is in?

Teacher. Yes, we have one in Woodbridge's larger Geography, but it is composed of scholars very much older than he is. I think he could not go on with them.

Mother. Well, then, I think I should rather have him go on alone, than put in that little class.

Teacher. Just as you please, madam. I will make any arrangement you choose, which I can make consistently with my obligations to the other scholars. If he goes on alone, you are aware I can devote but very little time to him.

Mother. Well, if you do not devote more than ten minutes to him, I should rather have him go on in Worcester's Geography than continue as he is.

Teacher. But ten minutes would be a great deal more than I could devote to him, consistently with the claims of the others.

Mother. Why, sir, his father pays as much tax in proportion as any man, and I think we have a right to expect that our children shall receive their fair share of attention.

Teacher. Certainly, madam. But consider a moment

what his fair share is. I have sixty scholars, and there are in the forenoon three hours only, making just three minutes for each scholar. So that if I attend to my pupils separately, I could not give more than three minutes to any one, without giving the others cause of complaint. Now in reading, writing, spelling, grammar, and arithmetic, and other things, your son is classed with the other boys, so that only a very small proportion of the three minutes could be assigned to Geography. I should think not more than a half a minute. I can hear him alone, devoting that time to him if you wish it, — or I can put him in the large class, and let him get on as well as he can. I *supposed* it would be better for him to be classed where he is, but just as you please, I will make any arrangement which you desire.

The mother looked perplexed ; and on making further inquiries respecting the class in question, found that the representations which she had taken without any question, from her boy, were, as might have been expected, such as to give very erroneous views of the state of the case ; she therefore, very cheerfully withdrew her claim for separate instruction.

Now we do not mean by such an illustration, or by any of our remarks on this subject, that parents are never to make any suggestions to the teacher about the condition and progress of their children. Cases undoubtedly occur in which they ought to do so. But it would be well for them always to be sure that they really understand the facts rightly, before they propose changes, and to take care to consider what is the fair proportion of the teacher's time and attention, to which they are justly entitled.

V. Do not judge the teacher on the testimony of your children. There are a great many causes which should prevent reliance generally on their evidence alone, and

though there is perhaps no kind of testimony which is more readily and unhesitatingly received, than the stories children tell to their parents at home, about occurrences at school, there is no kind which ought to be received with more caution.

1. Children are liable to bias on account of the very immaturity of their minds. Some judgment is necessary in order even to understand and state facts ; for there are very few transactions so clear and definite and precise in their character, that the narrator must either describe them just as they occurred, or else wilfully falsify. The judgment is very much concerned, in all cases, so that even in a court of justice, almost as much depends upon the *intelligence*, as upon the *honesty* of the witness. This is especially the case in regard to such subjects as are usually made matter of discussion between a teacher and the parent, in respect to which the testimony of the child is usually so unhesitatingly received. They relate perhaps to the nature of his studies, to the manner in which he is classed, to cases of discipline, the degree of guilt incurred, the degree of severity used, the state of opinion among the other scholars, and other similar topics. Now it is perfectly plain that statements in regard to all such points, involve not merely matters of fact, but matters of opinion ; or rather the whole account which the child gives, is really a statement of *its own view* of certain things observed, and the parents, while they imagine that they are merely giving the child credit for truth in telling what it has actually seen are really taking, without question, its opinions on a subject which it is utterly incapable of really understanding.

2. Again, children are peculiarly exposed to bias from their feelings, in their statements about affairs at school. A desire to have easier lessons, or to be put into a more honorable class, or to be relieved from some wholesome restraint, or to take the part of some playmate involved in

difficulty, and a thousand other similar feelings are very likely to come in and color essentially their statements, and especially their opinions, about what might seem, at first view, to be merely a matter of fact. Now we do not mention these feelings as very culpable, but only as sources of bias which really exist, on the part of children, and of which parents ought to be aware, that they may be on their guard against the coloring which, from these causes, must inevitably be given to their children's statements. It is very natural that children should not like restraint, or that they should sympathize with a companion in difficulty. It is very natural too, that, when there is no intention of saying what is false, the imagination of a child, excited by these or similar feelings, should exert a very powerful influence upon his testimony.

Cases very often occur, in which parents, on statements received from their children, come at once to a decision in respect to them. They may decide to take some important step, or may be even aroused to a feeling of indignation, which they go forth to express by words or deeds, and find when it is too late, that they entirely mistook the case. They set the neighborhood in a flame, or come with angry or threatening words to the committee or to the teacher, and on a little explanation, find all the grounds and causes of their anger actually slipping away from under them. There is something a little ludicrous in the figure a man makes, when he thus bristles into high displeasure at an object, which when he comes up to it, and brings down a determined blow upon its head, vanishes into air. Men are often placed in such a condition, especially when they allow their feelings to be aroused, in respect to any transaction, after hearing only one side. In such a world as this, where there is so much useless and groundless anger, we had all better make it a rule to be frugal of our indignation, until we are pretty sure there is cause. Resent-

ment, whether right or wrong, may sometimes be the means of removing difficulties or rectifying abuses, — but it is a very expensive and troublesome means, and the man who is determined to employ it, ought, at least, to make sure of the occasion.

3. Once more ; there is one other consideration which ought to influence parents, in receiving their children's statements. Many children will tell falsehoods, and the parent is the last to suspect his own child. Now we are very far from wishing to promote a habit of suspicion in parents. Nothing can be more injurious. Children should be treated with frankness, and their word never, or at least very seldom, be openly called in question, unless there is clear and positive evidence of its falseness. Still the fact that young persons are so prone to undervalue truth, and to be led by slight temptations to deviate from it, ought to make parents very cautious about taking any important step, or even forming a decided opinion in regard to transactions at school, merely on their statement. Where is the man, who can honestly say he never told a wilful falsehood in his youth ? He is scarcely to be found.

We have no doubt however that a very large proportion of children can generally be depended upon in respect to their word ; and ordinarily the less they are suspected, the more faithful they will be. All we mean to say is, that they are all peculiarly exposed, in case of strong temptation, to conceal or to prevaricate, and there are not a few whose word is worthy of no confidence whatever. These are generally more artful, and consequently more unsuspected, especially by their parents ; for parents are always slow to discover the faults of their own children. Every teacher of experience has had cases where a parent has assured him that his child always spoke the truth.—“I never knew him,” he says, “to tell me a falsehood in his life.” And yet the teacher has had repeated evidence of

his duplicity. In such a case we have known the evidence to be presented to the parent—and then, after looking confounded for a minute, he gravely insists, that it must be the very first instance of the kind which ever occurred. As we have before remarked, all parents are prone to be blind to the faults of their children, and this fact, which no sensible father or mother can deny, should lead all, — not to be distrustful and suspicious of their children, — not to chill, by their jealousy and want of confidence, that frankness and ingenuousness which may be so easily cultivated in childhood, — but simply to be aware of the dangers to which their children are exposed, and never take any important step, or let slip hasty and criminating words, or even come to an unfavorable decision against a teacher, without gaining access to surer sources of information than the *exparte* testimony of pupils can be.

VI. When the teacher has done wrong, do not condemn him too severely. The best of teachers must do wrong sometimes, and parents should soften the displeasure they may otherwise feel, by reflecting upon the peculiar trials and difficulties of his employment. Be very careful, too, that whatever measures you may take shall not be of such a character as to injure his authority in the school. Never express your opinions against him in the presence of your children, or give them the impression that in their contests with him, should they be inclined to enter into any, you will take their side. If he has made a mistake, consider what measures you can take to remedy it, but do not talk about it among your neighbors, and with your children, simply to get the victory in public opinion. It will only make the matter the worse, both for the school, the neighborhood, and especially for your own child. Consider, we say, what measures you can take, and take them kindly, deliberately, and with a friendly feeling. You must keep the peace between yourselves and him, for all the bitterness of the fruits of the contention, if contention arise,

come upon the head of your child. The pupil stands defenceless between you, and if you come to a rupture, his moral sensibilities, and every better feeling of the heart are crushed by the collision.

VII. Set your children such an example, too, as you wish them to imitate. Whatever your spirit is, they will imbibe it, and you will see your habits imitated, and carried out to extremes in their conduct. Parents see this in very young children, and are often made acquainted with some of their own personal peculiarities, by seeing them reflected in the actions of a little child. This tendency to follow where you lead, becomes stronger and more uncontrollable the older your children grow. If you are passionate, unsteady in your government, impatient and irritable, they will be so too, and thus you communicate to your offspring, a moral contamination which is far worse than any hereditary physical disease.

Such are some of the more prominent duties, which parents have to discharge in reference to the schools where their children are instructed. Far more, however, of the child's character, and progress at school, depends upon the general system of management under which he is brought up at home. Children well trained at the fireside make no trouble for their teacher; but when irregularity, insubordination, and passion reign at home, they will bring forth their rank fruits in the school-room, unless the most energetic authority keeps them down, and if parental neglect makes such authority necessary, they who cause it must not complain of its exercise.

In looking into human life, and seeing how entirely dependent, for character and happiness, the child is upon the parent, we cannot but consider it one of the greatest of the innumerable mysteries of divine Providence, that one human being should be placed so completely in the hands of another. The wonder is increased, by thinking how much skill, how much knowledge, how much firmness,

what decision at one time, and what delicacy of moral touch, if I may so express it, at another, are necessary, in order to succeed in training up the infant mind as it ought to be trained. It would sometimes almost seem that God has given to parents a work to do, of such intrinsic difficulties, as very far exceed the capacities and the powers of those whom he has commissioned to execute it. There seems, at first view to be a want of correspondence between what, in a wisely balanced plan, we might suppose ought to be nicely adapted to each other, — the moral capabilities of the parent, and the moral necessities of the child. We say at first view, for on more mature reflection, we discover simple principles which common sense and honest faithfulness will always suggest, and which, steadily pursued, must secure favorable results. Among the lower classes of society, we find many, very many families of children well brought up, and among the higher classes, and those too where virtue and Christian principle seem to reign, and where religious instruction is profusely given, we find total failure. The children are sources of trouble and wretchedness to their parents, from the time when they gain the first victory over their mother, by screaming and struggling in the cradle, to the months of wretchedness in later life, during which they are brought home, night after night, from scenes of dissipation and vice, to break a mother's heart, or to blanch the cheek of a father with suppressed and silent suffering.

What are the causes of these sad failures?

Why are cases so frequent in which the children of virtuous men grow up vicious and abandoned? There are many nice and delicate adjustments necessary, to secure the highest and best results in the education of a child, but the principles necessary for tolerable success, must be few and simple. There are two, which we wish we had a voice loud enough to thunder in the ears of every parent in the country; — these are two, the breach of one or the

other of which, will explain almost every case of gross failure on the part of virtuous parents, which we have ever known. They are these :

1. Keep your children from bad company, and
2. Make them obey you.

There is no time to enlarge on these points, but it seems to us, that habits of insubordination at home, and the company of bad boys abroad, are the two great sources of evil which undo so much of what moral and religious instruction would otherwise effect. The current of parental interest is setting towards mere instruction to such an extent, as to overrate altogether its power; and the immense injury which comes in from such sources as bad company and insubordination, is overlooked and forgotten. What folly, to think that a boy can play with the profane, impure, passionate boys which herd in the streets, six days in the week, and have the stains all wiped away by being compelled to learn his Sunday-school lesson on the seventh, or that children who make the kitchen or the nursery scenes of riot and noise, from the age of three to eight years, will be prepared for anything in after life, but to carry the spirit of insubordination and riot wherever they may go. No; children should be taught most certainly, — but they must also be *taken care of*. They must be governed at home, and be kept from contaminating influences from abroad, or they are ruined. If parents ask how shall we make our children obey, we answer, in the easiest and pleasantest way you can, but at all events **MAKE THEM OBEY**. If you ask how shall we keep our boys from bad company, — we answer too, in the easiest and pleasantest way you possibly can, but at all events, **KEEP THEM OUT OF THE STREETS**. The alternative, it seems to us, is as clear and decided as any which circumstances ever made up for man; you must govern your children and keep them away from the contamination of vice, or you must expect to spend your old age, in mourning over the ruins of your family.

LECTURE IV.

ON

MATERNAL INSTRUCTION

AND

MANAGEMENT OF INFANT SCHOOLS.

By M. M. CARLL.

MATERNAL INSTRUCTION.

ANYTHING true or really useful on the subject of Maternal Instruction, and the proper treatment of children, must be based on a knowledge of human nature. The maxim "know thyself," is founded in wisdom, since without it, all other knowledge is vain. Man has ever been prone to look at the world *without* rather than the world *within*, and to study the objects with which he is surrounded, rather than himself, the focus to which all these objects refer. His science and philosophy are drawn from the external objects which strike his senses; he penetrates the earth, interrogates the hidden rock, analyses the waters, the air, the light; he numbers the trees of the forest, calls them all by name; he divides, arranges and classifies the animal kingdom, acquaints himself with their habits, tames their ferocity, and by the superior force of his reason subdues them to himself; he scales the heavens, counts the stars, takes the dimensions of the planets, calculates their revolutions and measures their distances.

In short, by thus habitually viewing things external, and forgetting to look *within* he is drawn *out of himself*, and the internal powers of his mind become identified with mere

matter. Hence they assume an importance which does not belong to them and which was never intended ; the external is exalted above the internal, the visible above the invisible, the natural above the spiritual and the inductions of the senses and of natural science above the dictates of reason and intelligence enlightened from above.

We shall see the vast importance of self-knowledge, when we consider, that all other information derives its true value from the circumstance of its producing this result. Since the great end and object of the acquisition of knowledge or education, is to develop the human faculties, to form the mind, to enable us to understand our true relation to God and man, to fit us for the various duties in this world, and to prepare us for the enjoyment of the world to come.

A knowledge of the moral and physical nature of man, will lead to a just apprehension of nature and introduce us by the most direct path to the temple of wisdom. As no one can be said to be master of any art who does not understand its *principles*, so no one can comprehend the relation of things in the moral or visible world, without a knowledge of man, who comprehends in himself all the *principles* of both worlds. What is the creation but an outbirth, a visible manifestation of the principles and powers appertaining to humanity ? What but a mirror in which he may see reflected the qualities of his mind ? In every animal he may recognise an outward form and express image of some appetite, some passion, some quality residing in himself. The innocence of the lamb, the power of the lion, the cruelty of the tiger, the cunning of the fox and the subtilty of the serpent are all his. Nay, the properties of things inanimate all have reference to him ; nature is decked in beautiful colors, to delight his eye, sweet odors to regale his sense of smell, grateful flavors to gratify his taste, and sweet sounds to soothe his ear. He is possessed of powers capable of tak-

ing cognizance of every created thing and capacities for their enjoyment; he is endowed with principles of which the world of nature is at once the expression, the image and the exact counterpart. "The earth and the fulness thereof," is intended not only to afford sustenance to his body, but as a sort of metaphor designed to explain and illustrate the moral and intellectual qualities of his mind.

Not only do all things in the world of nature exhibit the hidden principles in man, but all things in the word of God. Man is the subject of divine revelation. As the visible world is a mirror held up to the outward senses of man and reflecting back upon himself his own image, so the word of God, is an intellectual mirror reflecting his moral nature, and containing the laws of the invisible world. Here the voluntary and intellectual powers find their proper objects, the secret motives and springs of human action are touched, hence are the seeds of faith which bring forth the charities of life, and hence is formed a moral sense, a conscience, which will guide and direct us through the labyrinth of the world. How important then is self-knowledge! and yet how neglected! We study everything but ourselves! and yet here alone shall we find the golden key, which will unlock the volume of nature, and disclose to us their inestimable treasures.

How indispensable to parents, to those who have the training and education of youth, is this knowledge! But to none more necessary than to Mothers. And yet how few who are acquainted even with the physical structure, much less of the mental organization and moral wants and necessities of the little innocent, helpless being to whom they have given birth! How desirable, that in addition to the natural instinctive affections of the mother should be super-added the lights of reason and intelligence, to supply the influences most favorable for bodily and mental development.

As the object of education is to *form* the mind, and to fit the man for future usefulness, it is extremely important that those upon whom this care devolves, should be acquainted with the nature of the little being upon whom they are about to exercise their skill. The constituent principles of his mind — the powerful influence of early impressions — the improvable nature of his faculties — the best *means* of developement — the effect of example, habit, and circumstances in forming the character, and his duties arising out of his various relations — these are all subjects of deep interest, and necessary to be understood by those to whom the culture of the mind is intrusted.

First, let us turn our attention to the constituent principles of the mind, and deduce our system from acknowledged facts and actual observation.

Here then is an infant ; let us contemplate it under the point of view proposed. What are its possessions ? Has it thought, understanding, reason, intelligence ? No ; It has a body, of wonderful structure, the form and lineaments of a human being, it has senses adapted in every particular to its new condition, it has a brain of surprising organization, it has animal instincts and appetites, sufficient to make known its wants, and to excite in the breast of the mother those affections arising out of the peculiar relation between them, and which prompts her to provide for the wants and necessities arising out of its state of utter helplessness and dependence. The infant then is furnished with nothing but the rudiments of mere faculties, both of body and mind, entirely impotent, but at the same time suited in all respects to its helpless state. These faculties however, are capable of being developed by exercise, and fitted for another condition of his being, in which strength of nerve and vigor of intellect are required ; and this successive growth and adaptation is only preparatory to a still higher unfolding of his marvellous powers, his moral and spiritual faculties,

intended to fit and qualify him for a nobler and more perfect condition in another and better world. For as the body is an image of the world, so the mind is an image of heaven, and is capable even whilst here of acknowledging the influence of the eternal and immutable principles of love and wisdom, which constitute the felicity of angelic beings.

In general the constituents of the mind are *will* and *understanding*; to the former belong, appetites, passions, affections, desires, and motives to action; to the latter appertain, thought, ideas, reason, intelligence; the moral and intellectual nature of man. Hence the mind, by which we mean both will and understanding, is natural and spiritual, since man is capable of being instructed in natural or spiritual science; instruction in the former opens and forms the natural mind, instruction in the latter opens and forms the spiritual mind. It is requisite to be aware of the true relation subsisting between the two faculties of will and understanding, that we may see which is the primary principle.

It will be found upon strict examination, that the understanding takes its tone from the will, acts an important though subordinate part, guides and directs those secret springs and movements, whose beginnings and activities originate in the heart or will. The will is the wind and tide which urge onward, the understanding the rudder which directs and controls the movement. Every man has some predominant passion which prompts to action and imparts the power of thought and reflection; for without affection or desire there can be no thought; where there is no activity, no directing power is needed. It is this ruling passion that is distinctive of character; it is this which forms real differences among men; for such as the ruling love is, such is the man as to his real internal quality. The man whose predominant passion is sensual pleasure in any of its degrading forms, receives the impress of sensuality upon his character, and it is apparent to all the world that

his understanding has been beguiled and seduced to become the pander of a debased and corrupted will. His will has been beguiled by the serpent, and his understanding has consented. The same is true of any other ruling passion, whether the love of pleasure, the love of accumulating wealth, the love of fame on the one hand, or the love of country, or any of the Christian virtues on the other ; that which predominates will fix its impress upon the character for the time being, and impart its real quality however it may be disguised by external appearances. The will and understanding bear the relation to each other of end and means, the former originating in the will, whilst the latter furnishes the ways and means of accomplishment. "Keep thy heart with all diligence, for out of it are the issues of life."

If our reasoning be correct, we have arrived at an important conclusion, viz., that the will or moral part of our nature is that which rules the man, constitutes his real quality and forms the secret spring of all his affections, thoughts, words and actions. To form a new heart or a new will is the end to be attained and should be the object of all instruction and education.

We have now a distinct and definite object, which should be kept steadily in view, from the commencement and through the whole course of future discipline. It is this principle that first manifests itself in early infancy, the first motion, instinct, or appetite, originates here. If then the infant is nothing but a bundle, so to speak, of mere faculties, intended for future use and to fulfil certain definite purposes, which use and which purposes depend upon the proper developement of those faculties, the great point of inquiry is how shall the developement of these faculties be effected in the best manner. What are the best means of bringing about the desired result ? How is the unfolding of these powers of body and mind to be effected, and where are we

to begin? Shall we commence our operations with the heart or the head, the moral or intellectual part of our nature? If the man is to be reformed, how is his reformation to be effected? Are human means adequate to the task? Example, habit, instruction, precept, education, will work wonders! It is proverbial that "habit is a second nature," and will do everything we can desire, provided they are habits of a proper kind, growing out of a comprehensive education embracing the whole man. "Train up a child in the way he should go, and when he is old he will not depart from it," is a maxim founded in a deep knowledge of human nature, admits the power of early training and discipline, and recognises the lasting influence of education in forming the mind, and fixing the future conduct.

But at the same time, we must not be unmindful, that human means, and human instruction, together with their effects upon the mind, are not things in themselves independent of a higher power, their province being to adapt and prepare the mind for the operation and influence of an agency that is superhuman. The design of religion and of education appears to be, not to destroy any of the original faculties, but to preserve them from perversion, to build up, to regulate and to direct them to their proper and legitimate objects. Indeed the hereditary nature, the constitutional temperament, never can be radically changed; it can only admit of modification, bent and direction by education. Like plants of different species which may be bent and made to grow in any direction, whilst their nature remains the same.

It is admitted that early association, first impressions, example, habit, in short, the circumstances in which the infant is placed and the influences to which it is subjected, have a most powerful effect on the growth of the mind and character of the man; but it must be remembered that

these are fostering, counteracting, modifying influences ; that they do not originate anything, their province being to operate upon and give a suitable direction to those nascent powers and faculties, whose constitutional temperament, and inherent hereditary tendencies, they may bend, but can never radically change. Were this doctrine true; to wit, that man is wholly the creature of circumstances, then it should follow, as a necessary consequence, that those who have been brought up under the most favorable influences, would manifest this change of nature which the doctrine implies ; but when did education ever change the constitutional temperament of a man ? When did it ever change the sanguine into the phlegmatic, or the mercurial into the dull and plodding ? Take the offspring of French parents and train him from infancy among the English, what would be the result ? From the principle of association and imitation he would acquire their language, their manners, their customs, but he would retain the vivacity of his nation ; he would be in his temperament a Frenchman still. His language, his manners, his habits would be English, but the form and figure of his body, his complexion, his countenance, and his spirit would all be French. It is an universal principle that like begets its like ; that not only form, features, complexion, are inherited, but even diseases, and tendencies to particular vices, sympathies and antipathies are inherited also ! This is undeniable, being confirmed by fact and experience.

Seeing then that the will principle is the prime mover in man, and that here the secret springs and motives of all our activities are centered, the next inquiry is, how is this principle to be reached ? Is it within the power of maternal agency, or have early, first impressions any effect upon it ?

A counteracting influence must be resorted to, at a very early stage, before the tender plant takes a wrong di-

rection, and becomes rigid and unyielding by habit. To apply this counteracting influence with discretion and effect the mother should not be ignorant of the fact of man's depravity in general, and of the particular hereditary tendencies of her offspring. She should be thoroughly aware of the consequences of indulging those evil propensities which manifest themselves at a very early period ; propensities growing out of the selfish nature which all inherit, and which constitutes the root of that deadly tree whose fruit fills the world with death and wo.

In her hands is the bud of human existence ; its future expansion, beauty and sweetness will depend, in a very great degree, upon maternal culture. She must watch over the tender plant, the dews of parental affection must distil upon it in gentle and timely effusion, no worm or noxious insect must be permitted to invade this precious bud or eat its way into its crimson folds, to blacken and destroy this human blossom.

This will require watchfulness, care, and even at times considerable self-denial, heroism and energy of character ; for she must grapple with and strangle the serpent, which she may soon discover, not in the cradle, but in the bosom of her child.

Were I called upon to form a system of education adapted to the present state of society, calculated to exert a counteracting influence against the prevailing vices and disorders, one adequate to our necessities, I would commence with the fair part of the creation ; who being first in the transgression, should be made the first also in applying the remedy. The commencement of her education, and every step of her progression, in the formation of her mind, ought to have a direct and steady bearing upon this point. All the relations which she is to occupy, the relations of *daughter*, of *friend*, of *wife* and *mother*, and all the duties which she will be called upon to fulfil, arising out of these

relations, ought undoubtedly to be kept steadily in view, but especially *the last*. In this she will be called upon to bring into exercise all her knowledge and experience, to exert an influence upon her husband, and children, which none but a wife and a mother can exert, and to act a most important part in forming the character and habits of the succeeding generation. The course of female study, and the end and object primarily regarded by parents and instructors, in relation to it, form a sort of test of the character of the age, and the degree of civilization to which we have attained ! If we are desirous of knowing the state of refinement in any nation or community, we need only turn to their history with a view of ascertaining the position occupied by the female in the social relation, and we shall meet with the desired information. In some conditions of society, we shall find them regarded as a sort of inferior order of beings, treated as menials, their comforts disregarded, their improvement wholly neglected. In some countries, we find them subserving the purposes of avarice, and cupidity, ministering to the basest of human passions, objects of traffic and merchandise. In a state of society a little more advanced, when the comforts and conveniences of life began to receive attention, we find them trained to household duties ; and skill in the needle, the spindle and the loom, constituted their course of instruction.

But ease and comfort led to luxury and refinement ; the female was again called upon, another advance was to be made, and her circle of instruction was to be extended in order to meet the demand ; various female accomplishments were to be added to the homely arts and household virtues of the staid and sober housewife, who flourished half a century ago !

“ A new world rises, and new manners reign.”

This most respectable, most worthy, and most excellent

character, the height of whose ambition it was, to keep things snug and comfortable at home, and take care of her children, is fast receding from us, and another race has arisen in her place. Other fashions, other books, other studies, other manners now prevail. Thus we learn from the documents of history, that the state of the female has always indicated the state of society in general; and whether we regard the age of barbarism or the age of chivalry, the age of plain common sense, or of refinement and fastidious luxury, her condition and the course of her instruction have been intimately connected with it. She has always shared the toils, but not always the comforts of man; she has ever ministered to his necessities, shared his dangers, and promoted his comforts; in one age his slave, in another his idol, and in another his sensible companion and tender partner. In the march of mind, and the gradual elevation of society, she has risen with it, not as an effect, but she has contributed in no small degree as a *cause* in bringing about this result. How different would this result have been, had the true relation of woman been better understood, her influence upon society been better estimated, and had the object of her education been those higher maternal relations and duties, whose legitimate province it is, to form and mould the infant mind, and to sow the seeds which are to be brought to maturity in the future man! This has never, as far as history informs us, been the primary object of female education, nor is it the main object now; when it shall become so, it will effect a great change in the course of female study.

Let us turn our attention for a moment to that which appears to be the prominent feature, as the *end* of study in female schools, in order to ascertain whether it is founded upon a knowledge of the radical difference subsisting between the male and female character, and to the different province and routine of duties which each is called

upon to fulfil. The object at present seems to be, not so much to prepare our daughters for the relation of a mother as that of a wife ; not so much to instruct and manage the children as to get and manage a husband ; not so much to instruct them in a knowledge of human nature, and thus prepare them for the important duties they will be called upon to fulfil by becoming sensible, intelligent and discreet mothers, as to form an advantageous connexion, and a fashionable establishment ; by which they may be exempted from household cares, and transfer the sacred duties of a mother to the hands of servants and hirelings ! Hence in accordance with this object, the education of our daughters is showy rather than solid, calculated to attract attention, rather than to form a fixed and permanent esteem and affection, that will stand the shock of adversity. Destitute of moral energy, and ignorant of the useful and profitable arts of life, when by the vicissitudes of fortune, their circumstances are reversed, they are not prepared to contribute anything to the support either of themselves or their children. But it is obvious, that a female, in order to be suitably prepared to meet the exigencies of life, should have her circle of instruction very much enlarged, so as to bring all her powers, both of body and mind into exercise, and to become acquainted with those useful arts suited to her nature, which are quite as various, and probably much more various than those of the other sex. In short, the whole woman should be educated, her heart, her head, her hands ; and all with a strict and peculiar reference to the great and paramount duty of superintending, with intelligence, wisdom and discretion, the unspeakably important and interesting period of infancy !

The course of study, the tastes, fashions and habits, prevailing among females, as they always have been an unerring index of the general state of society, so are they now ; for in these tastes, fashions and habits, we may

discern those objects and qualities, that are most highly appreciated by the other sex. If men are educated in ignorance of those peculiar characteristic qualities, which constitute the true loveliness of the female character, if he regard her *person* rather than her *mind*, his standard of excellence will be very low, and the consequence will be, that the female will accommodate herself to this state of feeling, and the objects of her ambition will not rise above this level. The next advance that is to be made in the social condition, will be to raise this standard of estimation immeasurably above its present grade, that the high relations of wife and mother she is ordained to fulfil, and the pure and heavenly qualities of heart and mind of which she is capable, may be better understood. Surely no man can justly claim or deserve the character of a gentleman or Christian, who does not regard those higher qualities of the female character with the most profound respect, and even with a feeling approaching to reverence. Not as possessing those qualities of herself independently, but as regarding them as the most lovely reflection of the Divine image and likeness to be found in this lower world! This feeling should be instilled into the mind from the cradle! The one sex should be taught to understand the true object to be attained, and that which alone constitutes true loveliness, and the other to regard those qualities with respect, reverence and love!

The following beautiful extract is from an anonymous author :

“ This train of thought minds me of a sentiment uttered recently by a Peer in the English House of Lords, who evidently viewed this subject in its true light. In an incidental declaration he observed, ‘ that he felt for the other sex the *most profound reverence*.’ Many noble sentiments have been expressed in the national assemblies both abroad and in our own country, but none exceeds this in true dignity ;

and if there were reason to believe that it is universally felt by the members of that house in which it was expressed, it might go far to reconcile us to, or even make us fall in love with hereditary honors, as being calculated to preserve in view a high standard of thought and action.

“There is not any principle of greater importance, or more directly conducive to human improvement and happiness, than this; — *That the male sex should cherish for the female a sentiment of ‘profound reverence;’* not, indeed, altogether upon the chivalrous principle, which made *outward* attractions in some considerable degree the subject of that sentiment; but upon the more interior grounds that the other sex is endowed with a capability of receiving from heaven the purest influence possible to exist, and which is destined to be transmitted through the medium of woman to man, to refine and exalt his character by attracting him to her, and so inducing a state of most pure and generous affection. Were it possible for man to be without this softening and refining influence, he would be ruder than a beast. Now could the male sex be prevailed upon under the guiding influence of enlightened and pure religious principle, to hold sacred the purity of woman as the first recipient of this heavenly influence, and to receive it from her without perverting it by unchastity of imagination or action, then human happiness would no longer be a matter of uncertainty, or the dignity of human nature be a debateable existence.

“It is this distinguishing characteristic of woman, supposing it to be developed by virtuous sentiments and conduct, which qualifies her for the duties and endearments of the marriage union, and for the supremely important office of preparing the foundation, in infancy and childhood, of all that is pure, and wise, and noble in mature age.

“This being the distinguishing characteristic of the sex, a man ought to approach *every* woman with *reverence*,

because she possesses it, or because she *is* a woman ; — but when he finds it either uncultivated or perverted, he should and he will, if his mind be rightly constituted, with inward pain and repugnance, avert and withdraw himself. This peculiar female endowment is neglected and uncultivated when woman is selfish, and more concerned about the charms of her person than the purity of the principles of her mind ; it is perverted when she is unchaste.

“ It appears that the sentiment is not too strong when, viewing the sex *generally*, it is remembered, that the real object of it, is nothing less than the *Divine image* as impressed, in potency and capability, on the female soul, and set forth in the beauty of her form and person, as the proper personification of the peculiar virtue and loveliness of which the female character is susceptible. Or, supposing this divine image as peculiar to the female to be formed and brought out in some completeness by a union of good sense and virtue, it will surely deserve to be regarded, for its purity and loveliness, with that depth and tenderness of feeling which the term reverence implies. In truth, I believe that no sentiment weaker than that of reverence is adequate to maintain in young men, uniformly and constantly, a compliance with the object of the Lord’s searching declaration, ‘ Whosoever looketh on a woman, to lust after her hath committed adultery with her already in his heart ;’ and thus to preserve in them a true and chaste view, and thence that pure and reverential love of the other sex, which is the incipient state of conjugal love.

“ Now he who feels it his duty and privilege thus to contemplate the other sex, will necessarily look for and expect, some qualities of the spirit or mind to be developed and matured which are worthy of his reverence. In *his* view the dress, the carriage, the shape, or the complexion, will appear as little or nothing, when put in comparison with those prevailing virtuous sentiments which indicate a *care-*

fully formed character, on the basis of religion and conscience. Being both prepared to yield reverence, and being in expectation of meeting with qualities worthy of it, it may be reasonably calculated, that females will be acted upon by the knowledge of such expectations; and will prepare themselves accordingly for the ordeal which they know they are destined to pass. This will happen, because the female is dependent upon the male for the gratification of her distinguishing desire, — *the desire to be loved*; — and she will, therefore, inquire the *conditions* on which this love may be obtained, — the *qualities* which the male most esteems.

“ A close observer will often see cause to lament, that young females appear, like the Israelites of old, to ‘halt between two opinions;’ they seem uncertain whether a religious or a worldly candidate for their favor will present himself, and undetermined to which character they will commit their happiness; and so they are *half* worldly in their views and manners, making *personal* requisites appear too prominent in their esteem, in order to meet and suit the views of any admirer of a *worldly* character who may address them; and at the same time *half* religious both from conscience, and because they would not wish an absolute, dissolute infidel. How much better would it be ‘to trust in the Lord and do good!’ How much more likely would such a *decided* character be to attract, under Divine Providence, a character equally decided! How much better it would be to guard against a half and half suitor; an amphibious animal, who may perchance grow weary of the comforts of the land, and plunge his partner into the dark gulf of married misery! Surely, every one may see that true religion and virtue can *scarcely exist at all in half and half characters*, — if it really be true, that a man must forsake *all* in order to be a follower of the Lord; and that a man ‘cannot serve God and mammon,’ for if

he will hold to the latter he must despise the former ! But too many who acknowledge these truths in *theory* appear to deny them in *practice*.

“ But if we would have females to prepare themselves for a union with a decidedly good and religious young man *only*, not anticipating the *possibility* of union with a meaner character, however well supplied with worldly requisites, we must remember, that reformation must begin with the male sex, for it is that sex which, by its demands and expectations, as well as by its prevailing sentiments and example, gives to the female its tone and character ; and perhaps the reason is, that in the male constitution, intellect or truth predominates, and in the female, affection or good, and it is the office of the understanding by its truth to define, point to, and to fix the standard of what is truly good. But although reformation should begin with the male sex, there is no reason why the female should not co-operate, or secretly act upon the former by her influence and behaviour, to bring about or further such reformation ; therefore, every female who is made acquainted with the true and blessed relation of the sexes, will be impelled by her own pious and pure feelings, uniformly to demand from the other sex, whatever her condition and connexions in life, a becoming behaviour ; and will endeavor to inspire and inculcate, as far as she may, and with that prudence with which she is peculiarly endowed, the true principles upon which man should act towards woman.”

“ A most comprehensive rule, which embraces the whole of this subject, and which from its purifying, elevating, ennobling effects upon the character, deserves to be written in letters of gold, is ‘ a love of the spirit and thence of the body ; ’ this is a chaste love of the sex ; an unchaste love is, ‘ a love of the body and thence of the spirit.’ Were the female world regarded according to this rule, what a blessed change would be wrought in our systems of education, and in the whole structure of human society !

“Virtue and wisdom are of no sex, for they pertain to the *inward* spirit: he who is capable of giving to them his *primary* regard, in contemplating a female, has his thought elevated to her spirit, and consequently it is raised *above* sensual ideas regarding the sex. But before a man *can* respect the spirit *first*, and thence the body, he must learn, by acquiring mental qualities himself, to perceive the beauty of the mind as well as that of the person; in other words, *true religion* must *at least*, have inspired him with a *determination to be outwardly*, and a *desire to become inwardly* chaste, before he can think, in the *first* place of the spirit of woman as formed of her own peculiar and lovely modifications of affection, virtue, and wisdom, or prudence, and thence think, of necessity, chastely of her person. Should the idea of a personal union, separate from a mental or spiritual union, with any female, be suggested to the thoughts of an individual who is the subject of such a chaste determination and desire, he would, while thus thinking reverentially of the lovely spirit, shrink from it with repugnance, or even with horror.

“Under the pure and impartial influence of this principle, a man will reverence a woman, *as a woman*, in every variety of her condition. He will feel *interiorly* the same sentiment in addressing a decent peasant woman, and an accomplished gentlewoman: it is far from him to take advantage of any accidental difference of circumstances, to utter words, or indulge in a behaviour, offensive to the chaste principle as existing, — for he always assumes, if possible its existence, — even in the mind of a female in the lowest ranks of life. And because he respects a woman, *as a woman*, his favor or kindness will not be shown to a female according to the degree of her personal agreeableness or beauty, but according to the respectability of her deportment. Not that he will be insensible to the charms of beauty, but he will regard that beauty as having been given

to woman by the Creator to render her an object of love and respectful desire to man.

“Are these rules deemed too strict for human infirmity in the present very defective period of society? Perhaps they are so; nevertheless they are heavenly rules, and the observance of them will not fail to insure blessings of the highest order.”*

Thus we clearly perceive that the state of the female is intimately connected with that of human society, and the effect of her influence is such, that no real advance either in our physical, moral or religious condition can be made without it. How necessary then, that she should receive a suitable education! She who is at once the mother, the guardian, the exemplar, the instructress of our race! What a subject for the philanthropist!

It is a subject which challenges the most profound attention of the moralist and statesman, intimately connected as it is with the best and dearest interests of man; it claims the attention of the wise and good of every nation under the sun. The next advance in meliorating our condition will be to give to this subject the consideration it so justly demands. That individual who should devise a system or course of instruction and education, for females, adapted to their destination, peculiar genius and character, adapted to the relations, in which they are appointed by Providence, and especially the maternal relation, would prove a real benefactor to his species. And I would most respectfully suggest, that this Institute take the subject into their most serious consideration, and either by appointing a committee, or by offering a premium, in some degree commensurate with the dignity and interest of the subject invite public attention to it, and elicit the efforts of those whose talents and experience qualify them for the undertaking. When

* See “Intellectual Repository” — London.

I sat down to commit a few reflections to paper on this subject of "Maternal Instruction and Management of Infant Schools," the first thought presenting itself was, how exceedingly limited and confined in their influence, would be any suggestions upon the subject, seeing that the great mass of the female community are quite unprepared to profit by them. The great majority, at least in many sections of our country, are uninstructed ; and even those who have enjoyed the advantages of an education, know little more than to provide for the more physical wants of their offspring, whilst their early dispositions, appetites, passions and habits, are not subjected to any plan of operation, but left entirely to the disposal of chance, or the effect of surrounding influences and example. The course of study of those who have enjoyed the advantages of culture, does not embrace any knowledge of the constitution of children, the most common diseases to which they and their offspring are liable, much less of their mental and moral constitution. The literature of the day, and the books they read, are not calculated to shed much light on these subjects, but rather to beget an artificial taste and feeling which indisposes them to attend to the dull concerns of real life, and to nourish those feelings of pride, ambition, vanity and self-indulgence, which have a tendency to produce and encourage the sentiment that household duties and the direction of children, are vulgar concerns.

Let a plan of female education be formed without delay, and a liberal reward be proposed for the best practical essay, an essay that shall in all respects meet the difficulties and necessities of the case. Liberal premiums are frequently offered for other objects, professorships are founded for teaching some particular branch of human science, whilst this that lies at the very *root* and embraces them all has most unaccountably been overlooked and suffered to pass almost unnoticed !

Let us now proceed to take a plain, practical common sense view of this subject, with the ardent hope of effecting some improvement in this department, so intimately interwoven with the best interests of society, and also of ascertaining whether a discreet maternal discipline, cannot and ought not to be transferred to our infant schools. We have endeavored to shew, that differences exist among children, with regard to natural disposition, temperament, genius, taste, and propensities to particular virtues or vices.

The young of other animals are born into all the science necessary for the circle of use, which they are destined to fulfil, because their powers are limited to mere instincts, capable of improvement only to a certain degree ; but the infant is born in a state of total ignorance, a naked, tender, crying, helpless thing, claiming from the moment of birth, the offices of kindness and charity, as if to remind him that this first lesson is never to be forgotten through life. Who would suppose, that this little mass of ignorance and impotence, contained within it the rudiments of faculties capable of boundless developement, and of a power capable of subduing the fiercest animals, triumphing over the elements, adapting them to his purposes, and putting all things under his feet ! Created in the image and likeness of God, that he may possess in a finite degree, the infinite attributes and perfections of his Maker !

This is the being whose destinies are committed by the great Father of all to the hands of the mother, whose bosom alone God has endowed with answering affections and accordant instincts, which cannot elsewhere be found, and which must be exercised either for weal or wo, according as they are directed and applied by an enlightened wisdom and discretion.

What now has the mother to do ? what should be her principal aim ? The corrupt and depraved will of her child is to be counteracted, checked, subdued, or at least

rendered quiescent and obedient to a better influence. A new will, a new principle of action is gradually to be implanted in the mind. How is this to be accomplished? The great business of instruction and education must commence immediately! But all in proper order; all things adapted to its state. As the nourishment which its body requires is simple and in all respects suited to its tender and delicate organs, so its whole treatment must be regulated by the principle of adaptation and the beautiful fitness of things. The first course of discipline must have respect to its physical wants; — next we must regard our charge as a being already beginning to receive impressions from without, ready to take its first bent, and most delicately susceptible of the influence of habit. The light of reason has not yet dawned upon the infant mind, and prior to this interesting event a most important course of treatment and discipline is to be adopted. The infant is now to be subjected to the management of the great instructress, experience; first the experience of others, afterwards to be realized and confirmed by its own.

It is the subject of two powerful influences, the one from within, the other from without; the first, a heavenly, celestial influence; the last, the influence of the external world pressing upon every sense, whilst the voice, the countenance, the very touch of the mother enters into the influences with which this little sensitive creature is surrounded! The plain or ground within the infant which receives these operations, is that of innocence!

The infant is now surrounded by influences both physical and moral, either of a congenial or unpropitious kind; and every passing hour leaves its impress, and begins to delineate the first faint and imperceptible outlines of characters and traits, which are destined in after life to stand out in distinct and bold relief. As the callow young of the feathered tribe, after exclusion from its brittle tenement,

by the genial influences of light, air, warmth and food, begins to be covered with a soft and delicate down, at first almost imperceptible, which gradually assumes the form and consistency of feathers and wings, to protect it from atmospheric changes, and enable it to fly ; so the tender babe begins immediately to experience a growth and expansion of its powers, both of body and mind, demanding a care and assiduity, commensurate with the dignity of its nature.

The watchfulness of the mother should be directed, at first, in surrounding her infant charge with the best influences in her power, carefully avoiding any treatment having the slightest tendency to form bad habits, or to foster any of the latent seeds of evil, as yet dormant in the heart of her child. The influences, which its physical condition calls for, are provided by the God of nature, and are to be applied with discretion, such as, a due degree of light, pure and wholesome air, food from nature's fountain, perfect cleanliness, and a manner of clothing, calculated to invigorate rather than enervate the growing frame.

With regard to moral or mental qualities, the infant is as yet in a mere negative, passive state, having neither judgment, reason nor any restraining power ; it does not act, but is only acted upon, by everything coming in contact ; in short, it may be said to be nothing but desire and appetite, and an inclination to refresh its feeble senses in frequent and long continued sleep, interrupted at times by the operation of internal influences, which break out and clothe its sweet, and innocent face with smiles or in quickened respiration !

The mother is called upon therefore, to follow, rather than lead the course of nature, not to interfere with nature's plan by too much action, but rather to abstain from action ; not to force or strive to give an artificial direction, but rather direct and gently lead things into " the way they should go ! " How admirably does this accord with the

weakness and imperfection of human nature ! Who cannot here see the wisdom and goodness of Providence, who, himself furnishes all things necessary for our well being, leaving nothing but their proper application, to man ! He who furnishes the elements necessary for our bodily growth, the heat, the light, the air, the refreshing showers, the food and the clothing, furnishes also the elements necessary for the developement of mind, and has instituted such a relation between the infant and the parent, that needs only to have its dictates followed, to insure the desired result ! This seems to be the plan of Divine Providence throughout, leaving as little as possible to the positive action and energies of man, which would require a foresight and a wisdom far beyond his powers. Hence we find, that the moral code follows out the same plan, and man is required to abstain, in order that he may not interfere with the divine operation, and by shunning what is evil, be prepared for a reception of that love which must come from God, and must be reflected back again in humble and grateful acknowledgement to its source !

It will be seen then from the foregoing observations, that the mother need not be intimidated by the apparent difficulty of her task, that she has no occasion to adopt an artificial, complicated system in the management of her infant charge, but to follow the dictates of a genuine affection, which she will assuredly find in her own breast, if it has not been smothered and perverted by selfishness and folly. Let her follow nature, by adopting a few simple rules, and adhering to them uniformly and steadily, and she will assuredly, in performing the duties of a mother, soon begin to reap the rich harvest of reward, in the inexpressible delight, flowing from the sweet affection and obedience of her child. She will have the pleasure of witnessing from day to day, the little human blossom opening with new beauties and exhaling accumulating sweets !

The few simple rules, which I would suggest are, a genuine enlarged affection, sufficiently decisive to apply all necessary restraints, example, uniform government and obedience.

By a genuine enlarged affection, I mean an affection combined with tenderness and energy of character, which contemplates the future in the present, aware of the latent evils in the bosom of the child, watchful of their first appearance, and ready to apply the kind and degree of correction which the case requires.

It would seem to be decidedly the best and safest plan, to act upon the preventive rather than the curative principle, to strike at the root rather than take things in detail, by lopping off the branches. The root of those evils, which manifest themselves, either in childhood or maturity, is selfishness or self-love. Now this principle is to be subdued, and its opposite, viz. that new commandment, "that ye love one another," is to be formed in its stead. How is this to be effected? Is it by extirpating the old root, and substituting the new, or is it to be effected by engrafting the new on the old? The latter appears to be the process pointed out by nature. The gardener may extirpate the tree that is barren or produces sour fruit, and plant another in the same spot, (or he may engraft a good tree upon the old root;) not so however with man; if you destroy the root you destroy the man. We therefore infer that education is not intended to destroy any principle in man, but rather to restrain and regulate by superinducing or forming in the mind a new principle.

All that is necessary then for the mother, is to introduce order and regularity into her government and apply, but apply effectually, those restraints and correctives to those outbreaks of temper and frowardness which will soon begin to make their appearance.

A regular plan of action, uniform government and good

example, always exhibiting as much love, mildness and cheerfulness, as is consistent with that decision which will command respect, is all that infancy requires ; and if persevered in, will go very far indeed towards accomplishing our wishes and rendering recourse to harsher means unnecessary. By regularity of action I mean what may be called a proper *nursery system*, having reference to regularity as to sleeping, washing, dressing, taking food, carrying in the arms, which things though apparently small matters, yet inasmuch as they are effectual in laying the foundation of the *first habits*, which will constitute the plane of future habits, are in this view of vast importance, and exert a most decided influence both upon the child and the parent. On the child by training it up from the beginning in “the way it should go,” and on the mother, by beginning early to habituate herself to system and regularity, which will become more and more necessary, as the infant advances into the state of childhood. In this early spring, this seed time of life, this season of sacred, tender affection and endearment, are to be stored up in the inmost nature of the little innocent, the first rudiments of those latent, filial affections, which are to form the ground of a celestial, heavenly influence, to temper, to restrain and sustain us in the conflicts incident to human existence. It is of great importance, to excite in the infant bosom those states of affection, towards parents, nurses and playmates so congenial to this tender age as frequently as possible, as they are among the best and happiest influences with which it can be surrounded, and among the most lasting of its early impressions. Before it is capable of actual transgression, and of course perfectly guiltless, it is open to a purer and holier influence, and like the bee is laying up a store of honey in the inmost recesses of the hive, which will sustain it during the long and dreary winter of life. Let the mother assist with all her power by taking advantage of every favorable occasion, in storing up this

blessed honey, this *hidden manna*, which will form an internal store, adequate under the Divine blessing to feed and nourish it, through the wilderness of life, until it reach the borders of the heavenly Canaan, where other food better suited to its states and necessities will be provided.

It is evident that during this state or period of helpless infancy, previous to the dawn of reason, before the infant can distinguish between right and wrong, the restraints of parental authority on the one hand, or obedience on the other cannot be applied. Tenderness and affection, studiously avoiding the formation of *bad habits*, and as much system and uniformity of management as will tend to the formation of *good habits*, is all that this period of existence requires. In this state we have seen, that there is the most perfect fitness and harmony between the innocence, feebleness and appetites of the infant, and the maternal affections ; we shall be able to detect this beautiful harmony in every advancing stage of its progress towards maturity : we shall see it in the presence of another principle now about to be called into activity; viz. the all important principle of *obedience*. Let us notice for a moment the beautiful adaptation of this principle to the growing necessities of the child.

The little being now emerges from the state of infancy, and begins to approach the confines of that interesting period called childhood. Its little limbs have acquired some strength, its motions and actions begin to give a more definite form to its desires and appetites, the first rudiments of thought manifest themselves in the lisping of half formed words, and the pearly teeth begin to shoot forth, indicating a growth which calls for more solid food. All these changes are so many indications to remind the mother, that another principle is speedily to be added to her little code of laws, which is to exert a most powerful influence on every succeeding stage of her child's existence ; which is to be chiefly instrumental in forming its disposition and character, and

without which it will be left destitute of any steady rule of action, a prey to headstrong passion, appetite and selfish caprice.

This great, this most important principle is *obedience*, suited in all respects to the ignorance and inexperience of the child, affording the most salutary of all restraints. It is intended by infinite wisdom that the child should experience all the benefit of that knowledge, experience and wisdom possessed by the parents, in whom all the apparent harshness and unpleasantness of authority and command, can be tempered and sweetened by parental affection. This design of Providence will be frustrated by a neglect to exercise a proper authority on the one hand, and by a spirit of disobedience on the other. Another consideration showing the great necessity of obedience, is that arising out of the relation subsisting between the child and its earthly and heavenly parent. The child stands in a relation to its earthly parent corresponding to that in which the latter stands to his heavenly Father ; obedience therefore, to the one will be the surest means of securing obedience to the other. There are three codes, or different degrees of law to which the child will be required to yield obedience ; the domestic or parental, the civil or social, and the moral or divine law. Obedience to the first prepares for those which follow ; obedience to the parental law, prepares for obedience to the civil, and obedience to this prepares for obedience to the divine law. There is no principle so suited to the condition of childhood and youth, so efficient in forming human character and so comprehensive in its influence as obedience. It meets the requirements of his present and future relations, in the family circle, in the school, in the college, in society, in the church it is equally and alike indispensable. In his progress from childhood to youth, and the course of discipline to which he must be subjected, he will of necessity be exposed to a great variety

of influences, some salutary, but by far the greater part of an opposite nature ; the influence of the nursery, of the family circle, of playmates and companions and above all of the school. Nothing but an habitual and sacred regard for truth, obedience to the law of right, and a desire to obey this law for its own sake and because it *is* right, can furnish a proper motive of action, a motive superior to the mere hope of reward or the fear of punishment, and which will enable him to meet effectually those powerful influences. An early, habitual obedience, will render unnecessary those coercive restraints which have to be resorted to with ill-educated children, and which not unfrequently, destroy or deaden the nobler feelings, sour the temper, induce contumacy of disposition, and disrespect towards superiors, a recklessness of behaviour that sets all authority at defiance, and implants worse principles than those we strive to correct. The curative process, or the work of correction generally falls to the lot of the teacher, who is but too frequently ignorant of the proper means of cure, and injudicious in their application, and the restraints, the stripes, the tears and the groans witnessed in the school room, are but penalties paid for maternal neglect. Let the mother then attend to this sacred duty in the proper time and place, if she would avoid risking the future happiness of her child, and save it from this disgraceful and painful process. Let her use the rod to check and subdue the stubborn, froward will of her child, but let it be applied early, judiciously and effectually ; its frequent repetition will not be required, either by herself or others, and she will confer upon her child an incalculable blessing, "Correct thy son and he shall give thee rest : yea, he shall give delight unto thy soul." Prov. xxix. 17. "He that spareth the rod, hateth his son ; but he that loveth him chastiseth him *betimes*." Prov. xiii. 24.

These are some of the first lessons, and the first steps

in life ; let that mother who would save herself and her child many a pang, lay these things to heart.

An habitual and voluntary obedience, during the season of childhood and youth, will be found to be the only kind of restraint, which the case requires, and which is in all respects, adapted to the relation subsisting between the knowledge and experience of the parent, and the ignorance and inexperience of the child. From a willing obedience to parental authority to obedience to divine law from submission to an earthly to that of a heavenly parent, the transition is easy and natural. It will give rise to another restraining principle of greater dignity, purer and holier in its influence, in all respects as well adapted to the government of the man, as the former was to the government of the child ; I mean the principle of *conscience*. *Obedience* is suited to the child, *conscience* to the man ; the former, to a condition when the appetites and passions are strong, and the powers of judgment and reason are weak, the latter to another condition in which man is required to govern those appetites and passions as of himself ; the former is applicable to a state of pupilage, the latter to a state of manhood ; the former to a state of parental authority, the latter to a condition, in which this authority is to cease, and conscience is to take place of parental law.

That faculty to which we give the name of *conscience*, like the other faculties of the mind, is connate, but its quality, degree and restraining power, are the result of education. It is the index of the will and understanding, and points out the moral state and condition of the man. Enthroned high above the other faculties, she scrutinizes the desires of the will and thoughts of the understanding, and if enlightened by religion, she faithfully distinguishes between the right and the wrong, and pronounces a just and righteous judgment. She does not act

however, in an arbitrary manner, but claims her power to enforce obedience from the state of the lower faculties, and their previous acquired habits of submitting to parental control. Science, reason, habit, should be the servants and handmaids of religious conscience, and the province of education is to prepare them for her government.

It is evident that conscience derives its quality from education, and is either spurious or genuine according to the religious principle in which any one is brought up. The man who receives no religious instruction, but is instructed merely with reference to this world, will have no religious conscience at all, and the only restraining power in his mind will be that resulting from the hope of reward or the fear of punishment ; the laws of society instead of the divine laws. Were not this so, conscience would be a universal principle, acting with undeviating uniformity, in every region of the earth. But we find the Hindoo, the inhabitant of China, the Mahometan and the Christian, possessing a conscience at utter variance with each other, and influenced by religious customs entirely different ! According to the religion of Brama, it is allowable to expose the aged to perish with hunger on the banks of the Ganges, or for a widow to offer herself as a sacrifice on the burning pile with the body of her husband ! The conscience of the Chinese will permit them to drown their infant children, if weakly and deformed or when the means of subsistence are difficult to be obtained ! The religious conscience of the Mahometan allows of polygamy ; whilst the conscience of the Christian regards all these practices as dreadful enormities and shrinks from them with horror ! Thus it clearly appears that all possess the faculty of conscience, but that it derives its quality from education, and is spurious or genuine, according to the religious principles by which it is developed and formed.

This view of the subject seems to confirm the idea of Locke, who defines conscience to be “ the opinion which a

man forms of his own actions." This opinion will of course be correct or otherwise, according to the state of the will and understanding; according as these have been enlightened and purified by genuine truth, consequently, according to the kind and degree of education which the individual has enjoyed and its final result in forming the mind.

With regard to the "management of Infant Schools," it would require a volume to enter into all the interesting details; at present a brief sketch must suffice. If the maternal instruction has been judicious, and the habits of order, truth and obedience have been formed in the nursery, it will not only render the management of Infant Schools comparatively easy and delightful, *but it will point out the plan to be pursued.* We shall transfer the maternal plan to the Infant School, and follow out the system commenced at home. The circumstances will be different, but the principles of government and moral discipline will be the same. The same attention to order and regularity, the same habitual obedience, the same adherence to good example, the same watchfulness in the formation of habits, the same sacred regard to truth will be required.

The circumstances in which the child is now placed are new, and in many respects very different from those to which it has heretofore been accustomed. It is brought into new associations; other examples, other objects present themselves to its notice, all of which cannot fail to produce a change in the feelings, thoughts and habits of the child. But that probably which produces the most striking and immediate effect, is the *divided* authority to which it is subjected, and the new claims which are made upon its obedience. Heretofore, accustomed to render obedience to parental authority only, he sees in the person of his instructor another, who claims the same authority, and to whose government he is called upon to submit. The

parent must be willing to relinquish this authority into the hands of the instructor, and to impress as far as possible upon the mind of the child, that respect and obedience are to be rendered in the school ; this will be easy if the previous habit has been formed if not, a matter of extreme difficulty. The time of the child is now to be divided between the parent and the instructor ; the latter is to take the place of the former during the hours of instruction ; it is plain then, that there should be the best possible understanding between them ; the teacher should be acquainted with the peculiar disposition of the child, and a unity of object and mode of instruction should be adopted, otherwise they will counteract each other, and the mind and disposition of the child will suffer. The mother should pay frequent visits to the school, and encourage in every possible way both the teacher and the pupil.

A neglect of those things, and other causes, have had the effect to retard these useful establishments, and to disappoint the reasonable expectations of many. Among the other causes, may be enumerated incompetency in the instructors, a want of information with regard to the constituents of the mind, and the best means of developement, an indifference to the force of example and the power of habit, a want of distinguishing between the moral and intellectual faculties, and a mistaken view of the object to be attained. Hence the proper culture of the *moral* principle and the formation of *good habits* have received less attention than the more showy but less useful practice of oppressing the infant memory with scientific facts, unsuited to the dawning state of intellect ; facts which belong to a very advanced stage, and which should be the result of reasoning and reflection. This subjecting the infant mind to a sort of hot bed influence will produce a premature growth, and the effect will be similar to that of ripening fruit by *artificial* means ; the fruit may present a fair *outside*,

but the fine quality, and flavor which the operation of nature can alone produce, will be lost. We operate upon one faculty, at the expense of the rest, and imagine if the memory and intellect are cultivated the object is attained ; whereas, all the intellectual faculties ought to expand under the genial influence of the moral power upon which they are dependent. As the plant does not put forth one bud or leaf or flower in succession but a simultaneous growth is effected by the secret operation of the ritual energies, so all the faculties of body and mind ought to undergo a simultaneous expansion by the operative energies of love and kindly feeling, originating in the heart, the great fountain and spring of all activity. But all things in their proper order ; “ first the blade, then the ear and then the full corn in the ear.” The principle of adaptation should be kept steadily in view ; we should no more think of instructing the child in matters of science far beyond its capacity, than of feeding the suckling with solid food.

The object of instruction is, to develope and form in the best possible manner, the *moral* and *intellectual* faculty. For this purpose, the *harmonies* existing in nature, should be well understood both by parent and teacher. We have already adverted to the beautiful harmony existing between, the helplessness of the infant, and maternal affection, between parental authority and filial obedience, between the claims of civil society and religious conscience. We must discover and follow out the same fitness in every successive stage of advancement. As in nature there is an adaptation of one thing to another, as there is a manifest relation between the air and our lungs, between sound and the organ of hearing, savor and the sense of taste, odors and the sense of smell, light and the eye, so the effections of the heart or will principle and the understanding, have their appropriate objects, between which the same harmony may be discovered. As natural light is fitted for the eye,

so is truth for the understanding. The exercise of our faculties, by their appropriate objects, affords satisfaction ; and as knowledge is the proper food of the understanding, its acquisition should therefore be a source of delight. Why is it then, that the business of instruction, is in most cases regarded as an irksome task both by the teacher and the pupil ? Is it not, because these harmonies are not understood, that improper food both as to kind and degree, is presented and that the principle of adaptation is neglected in the moral and intellectual culture of children ? Instead of an orderly and regular expansion of the whole mind, we see it retarded in its growth, by blighting influences, or one faculty cultivated at the expense of the others. How often is the intellect stored with science whilst the moral habits of the pupils are utterly neglected !

In an Infant School, the moral habits of the child, should be of primary concern, and the acquisition of knowledge secondary. The moral culture of young children is not effected merely by precept, but by order, example and habit. Let them be taught habitually to conquer self and to *love one another*. The golden rule, announced by Infinite wisdom, “ To do unto others as we would that they should do unto us,” is the principle of action, which harmonizes with moral developement, and one which is suited to all the circumstances arising out of our social relations. This great principle ought to be constantly and steadily adhered to ; no violation of the rule should be suffered to pass by unnoticed ; in short, it ought to form the very atmosphere of the school and be inhaled at every breath. It is in this way, the *moral sense* is formed, and by connecting this feeling with our Heavenly Father as the source of all good, it becomes a *religious conscience*.

With regard to *intellectual culture*, let the instructor take advantage of the principle of *curiosity* or the desire to *know*, so natural to childhood, by leading and directing it in a

judicious manner; let a succession of suitable objects be introduced from time to time, as the case may require, with a view of forming the *habit of attention and observation*. As the object with the teacher should be, to *form the mind* of the child, and not so much the imparting of any particular branch of knowledge, the means made use of ought to be such, as best to answer the purpose. The objects therefore, and the subjects of instruction must fall within the sphere of the infantile mind, leaving those of a higher character to a more advanced stage of the pupil's progress. Let the principle of *adaptation* be the polar star, never to be lost sight of for a single moment.

Together with an habitual moral discipline, the *sensitive faculty* is first to be called into exercise, and the first book to be studied is the *Alphabet of Nature*. Here the *curiosity* will find ample scope, the habit of *attention* and *observation* will be formed; a fund of materials will be treasured up in the mind, which by exercising the reflective faculty, will gradually promote the growth of the *memory, imagination, understanding, judgment* and *reason*.

The study of the alphabet of nature, will be succeeded by the study of artificial signs, the study of things with their more obvious *qualities* and *uses*, by the study of words and names, and the previous habit of attention and observation will soon enable the child to become master of these, and thus a solid foundation will be laid for future progress in science.

Thus by a proper attention to *order*, commencing with the dawn of human existence and chasing away the clouds that hover over the morning of life, a son will be lighted up in the little moral world, whose genial and vivifying rays, will bring forward a mental growth of surprising beauty, and cause the intellectual wilderness to bud and blossom as the rose!

LECTURE V.

ON

TEACHING THE ELEMENTS

OF

MATHEMATICS.

By THOMAS SHERWIN.

ON TEACHING MATHEMATICS.

GENTLEMEN,

THE subject upon which I am to address you at this time, is, teaching the elements of mathematics ; it is one of great importance and I am conscious of my inability to do it justice. I shall not however indulge in theoretical speculations upon any particular scheme, warranted to be universally the best, but rather give you the results of my own experience. My endeavor will be to make my remarks of as practical a nature as possible, especially, as there seems to exist, at the present day, too great a tendency to theorize on the subject of education.

It has been supposed by many, that to excel in mathematics, requires peculiar original powers ; hence, that a considerable portion of mankind are unqualified by nature to comprehend any but the simplest truths of the science. Some even maintain, that, unless the organ of number be largely developed, there is no great hope of excellence. There are, no doubt, differences in the original constitution of different minds ; but the power of reasoning is an essential attribute of man, and if there be any department of human science attainable by all, it must be mathematics, since there is no other kind of reasoning, in which the data are so well defined, the steps of the process so short and

intimately connected, and the results so perfectly satisfactory.

But much has been attributed to the dulness of scholars, which is, in fact, owing to the ignorance or indolence of authors and teachers. Many present will, from their own experience, justify me in the assertion, that, till within a few years, the science of mathematics, with the exception perhaps of geometry, was taught rather as a mechanical process, than as an exercise of the reasoning powers. A set of rules, apparently as arbitrary as the commands of an eastern despot, was imposed upon the learner, and by these alone he was to be guided in his mathematical studies. No wonder then, that arithmetic was considered a difficult and uninteresting study, and algebra a kind of magic; and that boys of good abilities generally preferred any exercise of the mind to the mere manual labor of making figures. Although great improvement has been made in the manner of teaching mathematics, still, in many parts of our country, the good old way, as it is called, is preferred and pursued.

Of the utility of this department of learning you need not be reminded; but there is a great diversity of opinion in regard to the extent to which it should be pursued; and opinions vary much according to the end to be attained and the supposed effect of mathematics upon the mind and habits of the student. If the purpose be merely to qualify him to calculate interest and compute his gains and losses with accuracy, it is easily attained, although it is my opinion, that a good scientific education, based upon mathematics, is much more important to the mere merchant than has generally been supposed. But I will not do injustice to my audience by supposing them other than strenuous advocates of a thorough and comprehensive scientific education. Mere mechanical processes, executed by rule and without any exercise of the understanding, are totally incompatible with the demands of the present age.

With these views, I proceed to designate the objects to be aimed at in elementary mathematical education, and the means, by which, according to my experience, these objects may be most effectually secured.

The purpose of the study of mathematics is two fold ; first, as an exercise of the mind to develop the reasoning powers, and, secondly, the acquisition of knowledge. No study is more effectual in habituating the mind to close, accurate and continued reasoning, none more completely engages the attention, none more perfectly secures us from the delusions of the imagination and the domineering influence of the passions, than that of the exact sciences. To produce these effects, however, nothing must be treated superficially. The quantity studied is of no importance in comparison to the manner in which it is learned. In this respect many teachers and parents have erred. The inquiry has too often been, how much has the pupil studied, and not how well.

The knowledge acquired by the study of pure mathematics, may be either directly applicable to the arts of life, or a ground work upon which to erect a superstructure embracing the wonders of the physical world. Many facts in natural philosophy may be acquired by experiment and observation ; but still, through the aid of mathematics only, can a thorough acquaintance with the science be attained. In teaching the elements, therefore, both of these latter purposes, as well as the discipline of the mind should be kept in view, and the course of instruction be modified accordingly.

My purpose is to speak of the following branches, viz. Arithmetic, Algebra and Geometry, and make a few remarks on some of their applications.

1. Arithmetic has of late been divided into two parts, mental and written, differing only in this, that in the former the various operations are performed and their results

retained in the mind ; while in the latter, written characters are used to record the results of the successive steps. The mind goes through the same processes in both, except that in the one the memory is less burdened than in the other. The first ideas of number are undoubtedly intuitive ; the distinction between one and many results directly from the evidence of the senses, although the separate terms of numbering must have been the work of reflection and artificial arrangement. The first principles of arithmetic should therefore be taught through the aid of the senses. For this purpose almost any sensible objects may be used. Nature, in giving us ten fingers, has supplied us with a very convenient calculating machine, and one which seems to have been used by all nations of the earth. Cubical blocks serve a very good purpose, on account of the facility with which they may be arranged in various combinations. With these the child should be taught addition, subtraction, multiplication and division ; the different orders of units with their relative values ; and the nature of fractions, together with the various operations to which they are subject. After this, simple straight marks may be employed in operations upon whole numbers, and squares variously divided for those upon fractions. In all these exercises, however, the problems should be such as are easily performed and not fatiguing to the child ; they should also tend to unfold some general principle. The learner should moreover be left to perform them in his own way, by an actual arrangement of the sensible objects, or by a selection made by himself among the plates prepared for the purpose. If at any time difficulties occur too perplexing, questions may be asked which will soon remove them.

In the preceding remarks, I have supposed the learner to commence at a very early age ; for, although I object to the practice, which I fear is too common, of forcing the infant mind to premature and unnatural exertion, to the detriment

of the physical and even mental health and developement, yet I believe that the ideas of number and form, are among those first received into the infant mind. With proper precautions, the earlier and more perfectly those powers of mind used in the investigation of mathematical truths, are developed and cultivated, the greater will be the benefits of the study. For those who commence subsequently to the age of infancy, there is less necessity for the use of visible objects. The ordinary amusements of childhood will have given them a tolerable knowledge of the first principles of numbering.

But, even children learn to abstract at an earlier age than many suppose; it is advantageous, therefore, to dispense with sensible aids as soon as the learner can comprehend arithmetical operations upon abstract numbers. But the change should be made gradually; and for this purpose, after a question has been given relative to sensible objects, the same may be repeated in an abstract form. Thus, by degrees, the process becomes purely intellectual. In this manner the learner should be exercised in all the fundamental operations, beginning with the most simple processes, and advancing, according to his increased ability, to more difficult combinations, and those consisting of larger numbers. Thus two important objects are secured, viz. a familiar acquaintance with the principles of calculation, and an ability to perform a connected train of deductions.

After the pupil has been thoroughly disciplined in mental arithmetic, he may be made acquainted with the use of written characters; and here great care is requisite to prevent the process from becoming a matter of mere routine; the learner must not be allowed to perform any operation which he does not thoroughly understand, and for which he cannot give a reason. The system of enumeration, the different orders of units, the nature of fractions, and the four

fundamental operations both upon whole and fractional numbers, may be advantageously illustrated, as occasion may require, by referring the numerical characters to the sensible objects previously used.

In regard to the four principal operations, little needs be said to those who understand them, as their own experience, and the circumstances of their learners, will suggest the best method of teaching. In subtracting, however, I believe that many persons pursue a course for which they can give no better reason, than that it will produce a correct result. I allude to the practice of borrowing ten and adding one to the next left hand figure in the less number to pay the debt. It appears to me much more rational to resolve one of the units of the figure, from which the loan is obtained, into ten of the next inferior order, and after the subtraction is made, previously to subtracting the next figure, to diminish by one that from which the unit was taken. However, no evil would result from the practice, provided this principle were previously demonstrated; viz. that, if two quantities are each equally increased, the difference of the sums will be the same as that of the given quantities. After the learner is fully convinced of this fact, he will know that if he adds ten units of any order to one of the numbers, one unit of the next higher order, added to the other will make a just compensation.

As to rules in arithmetic, he who is properly taught will have little or no need of them, for every step is an exercise of reasoning or the application of a principle with which he is already familiar. Still, as a rule embodies the principles requisite for a particular class of operations, it is well that a few should be introduced into a course of arithmetical instruction. These should however be deduced from the questions, and not the questions performed by the rules, that is, upon their authority. It is important also when practicable, that the student form rules for himself,

as that is, to a considerable degree, a test of the accuracy with which he has studied and thought. Afterwards he may be required to learn the same rules, expressed in more appropriate words than those which he could himself supply. Great caution, however, should be exercised, when text books contain rules, lest the learner repose unhesitating confidence in their authority, without investigation and induction.

Many arithmetics contain a variety of "rules," as they are called, such as Reduction, Rule of Three, Practice, &c. But these are altogether superfluous, since they are nothing more than particular applications of a few general principles, with which a well instructed pupil is fully acquainted, and in the proper use of which he will be guided by his judgment. Indeed I consider them as detrimental, since even if understood, they have a tendency to substitute an exercise of the memory for one or several of the reasoning faculties, and the operation becomes perfectly mechanical. The Rule of Three, for instance, directs the scholar to multiply two terms together and divide by a third ; and in former times he knew no reason for it, except the authority of the rule. And besides, suppose he did know why he should proceed in this manner, the parade of stating the question merely, would require more time, than would be necessary to solve it analytically. As an example, if 2 bushels of corn cost 10s. what would 7 cost? According to the Rule of Three, the order of the terms must first be ascertained, which is not always obvious, then, as $2l. : 7l. :: 10s. :$ to the answer, multiply the 2d and 3d terms together and divide by the first, and we have 35s. ; whereas a boy who understood himself, would say 1l. will cost 5s. and 7l. 35s. So in compound proportion, the following question: If 12 men build 18 rods of wall in 4 days, how many rods will 16 men build in 8 days? which would be rather difficult, as well as tedious, according to the old

method, is easily solved as follows : If twelve men build 18 rods in a certain time, one man, will, in the same time, build $\frac{18}{12}$; this time is 4 days, and in one day, he will build a fourth as much, or $\frac{18}{12 \times 4}$; 16 men will build 16 times as much as one man, or $\frac{18 \times 16}{12 \times 4}$; and in 8 days, 8 times this last quantity, or $\frac{18 \times 16 \times 8}{12 \times 4}$ which fraction reduced becomes $3 \times 8 \times 2 = 48$ rods.

I would remark that powers and roots find their appropriate place in algebra, since but an imperfect explanation can be given of them without the aid of that science. To those, however, who are not expected to study algebra, some explanation of the process of extracting roots should be given, since there is frequent occasion for it in the mechanic arts. But what is called "Position," ought to be banished from all arithmetics, as it is algebra in disguise and is never understood by the mere arithmetician.

In all departments of mathematics, the constant aim should be to teach one thing thoroughly, before attempting others dependent upon it, and to arrange the different parts of the course, so that each may be a preparatory step to the succeeding. Moreover, a scholar should never be told directly how to solve a problem, but should be led to the solution by a series of questions from the teacher, which will place him in the right train of reasoning ; and if it be found that his embarrassment arises from ignorance of any preceding principle, that principle should be again investigated before any attempt at its application. Indeed the instructor must make himself master of the mental processes of his pupils, before endeavoring to remove any obstacles that impede the progress. Questioning the learner makes him exercise his mind, leads him to a knowledge of his own powers, and informs the instructor of the

nature and source of the difficulty ; whereas if he is told directly how to perform the question, indolence will generally exclude all exercise of the reasoning faculties.

In conducting the recitations, the answers to the questions and a repetition of the general method of performing them, should not be deemed sufficient ; but as many examples should be wrought out and explained as time and circumstances will permit. It is well also to vary the questions from those in the lesson, giving others of the same nature, but differing in some particulars. The attention of every individual ought to be secured and each required to perform all the steps of the process ; for this purpose I have found it beneficial to permit one scholar to perform part of a question, then call upon another at a distance, ask him if the process thus far is correct, and require him to continue the operation.

If the student is to advance from arithmetic to algebra and geometry, the course should be in some degree modified so as to prepare him for these departments. The practice of representing operations, resolving numbers into their factors, and finding all their divisors will be found beneficial. He should be particularly exercised and well grounded in fractions, accustomed to the analysis of questions, be made to see clearly the course of reasoning, and comprehend the different steps in their proper order. But above all he ought to know the nature of a demonstration, and be so trained as not to rest satisfied with anything short of demonstrative evidence, in any case that is susceptible of such proof.

11. ALGEBRA.

After the scholar is well grounded in arithmetic, but not till then, he is prepared to enter on a course of algebra, or universal arithmetic, as it is sometimes called. This differs from common arithmetic principally, in the use of general

characters instead of figures of a definite value, and in the operations' being represented, instead of being actually performed. Pure algebra never furnishes numerical results, but letters are used indefinitely, and afterwards any numbers may be substituted in their place; a problem thus generally performed, establishes principles applicable to all others of the same kind. Hence this science becomes strictly demonstrative.

In making algebra rather than geometry succeed arithmetic, I differ from some eminent writers and successful teachers. But I think myself justified in this arrangement by the great improvement that has taken place, within a few years, in the mode of teaching arithmetic and algebra. Indeed the latter science is to one properly instructed, as easy as the former. Many of the operations are performed even with greater facility than the corresponding ones of arithmetic. In its most important features, it is only a generalization of the principles with which the arithmetician is already acquainted. Nevertheless, if one or the other must be omitted, a knowledge of geometry is preferable to that of algebra, on account of its great practical utility in the arts, and the convincing nature of its proofs. No study, perhaps is so effectual as geometry, in giving a clear conception of what is meant by demonstration, and consequently, in exercising the reasoning powers and giving to the mind a strictly logical character.

Pure algebra, as I have already remarked, gives general results; but generalization cannot advantageously be introduced at first, in its full extent; the nature of algebraical operations should be taught in an inductive manner. Some works on this science commence with quantities, all of which are indefinite; and with learners of considerable maturity, this may, in some instances, succeed very well. But in general, this course is so abstract as to produce confusion and indistinctness. A young gentleman, of fine talents, with a mind somewhat matured, at Harvard Uni-

versity, asked me by what means he could make himself well acquainted with algebra. I directed him to study Colburn's work on that subject. At the expiration of six months, he assured me, that he had obtained much more knowledge of the science from that treatise, than from the less inductive ones of Euler and Lacroix, which he had previously studied. Until I perused this book, said he, I knew nothing about the subject. He afterwards studied with success, the more abstract works of the college course and left the university with the highest college honors. My personal experience and that of my acquaintance are in perfect conformity with the above statement.

The transition from arithmetic to algebra, should be by questions which may be solved without the aid of the latter. Let a series of problems be given, tending to establish some one principle, and let them be sufficient in number to make that principle perfectly familiar to the learner.

The student should be exercised in problems developing one principle after another, until he can easily and understandingly solve equations of the first degree, involving several unknown quantities. Particular care is requisite to see that he understands the nature of equations, and the operations that may be performed upon the two members without disturbing their equality. A boy is apt to suppose, that, when he multiplies an equation by the denominator of a fraction, he multiplies all the terms except the fraction; he should therefore be required to explain how he multiplies each term successively, until there can exist no misapprehension. The process and object of transposition and the reason why all the signs may be changed, need to be carefully inculcated; the fact that transposing a term is adding it to, or subtracting from both members, ought to be made perfectly familiar. I am in the habit of asking my pupils, what may be done to equals without destroying their equality. In most cases they will answer correctly, showing that the proper self-evident truths exist in the mind,

but that they need to be drawn out. If the learner be rather dull, the question may be proposed to him in the following form ; If you add the same quantity to equals, how will the sums be ? If you subtract the same from equals, what will you say of the remainders ? If you multiply equals by the same, what do you know of the products ? and if equals be divided by the same, what will be the relative value of the quotients ? also, if you add, subtract, &c. the first members of two or more equations, and perform the same operations upon the second members, how do you know that the results will be equal ? Similar queries may be proposed relative to inequalities. By frequently answering these and analogous questions, the learner will be prevented from performing his processes mechanically, and he will always be ready to give a reason for what he does.

But after a little practice in algebra, the greatest difficulty consists in putting questions into equations ; in this, therefore, learners need to be particularly exercised, and too much care cannot be taken to see that every step and every expression be fully and distinctly comprehended. Beginners are very liable to have vague and indeterminate notions of what a letter or expression is intended to represent. For instance, in stating the following question : A. and B. together owed C. \$245, and A. owed him 35 shillings more than B. ; how much did each owe him ? a boy will often say, let x equal what B. owed, without designating whether x represents a certain number of dollars or shillings. Distinctness in this respect will contribute much to the accuracy of the reasoning and the facility with which the problem will be solved.

In the solution of equations with several unknown quantities, I have found it useful to accustom the students to the three different methods of elimination, as sometimes one is preferable to the others. When the method by ad-

dition and subtraction is used, it is well to insist at first upon the representation of these operations; otherwise in cases where both the plus and minus signs occur, mistakes will often arise. With beginners, in equations of three or four unknown quantities, it is best, according to my experience, to find a value of one of the unknown quantities from each equation, and then form others by putting these several values equal to each other, and so on; as this method is less likely to occasion mistakes than either of the others. Bezout's ingenious method of elimination is not well suited to boys, on account of the liability to error in substituting. The necessity of as many conditions as there are unknown quantities, should be pointed out, as well as the circumstance, that equations may be identical with each other and yet appear under different forms.

After a sufficient number of questions has been wrought out to give the learner facility in the operations and ability to express the conditions algebraically, the business of generalization may be commenced. The same examples that have previously been performed, may be again wrought out, by substituting letters instead of numbers. A partial generalization only should be attempted at first, and afterwards numerical quantities may be entirely dispensed with. But in all cases, at this stage of the progress, it is useful to replace, in the general answer, the numbers for which the letters have been used, and afterwards substitute other numbers, so that no misapprehension may exist in regard to the generality of the formulæ. The learner is now advanced into the region of pure algebra; he will easily perform the various operations upon letters alone, and form rules which he knows must be correct, since he sees that letters may be used indefinitely and afterwards any numbers put in their place. But it is highly important that he be accustomed to translate general results into language, and to form rules for himself; otherwise, he is apt to com-

mit the rules of the book to memory, without taking the trouble to deduce them from the formulæ.

The fundamental operations on pure algebraical quantities, will present little difficulty to a student, who has faithfully pursued the course which I have prescribed. Some of the succeeding parts of elementary algebra, however, require a few remarks.

Proportions should be taught algebraically, and as I prefer to write them in the form of an equation between two equal fractions, it seems to me advisable to lay aside the denominations, antecedent and consequent, and use the more familiar ones, numerator and denominator.

The signification of results and the modification of the conditions of the questions accordingly, may be well illustrated, by problems of almost any kind; but algebra applied to lines is much the most effective for this purpose; for then the student plainly perceives, that a negative sign indicates a change of direction, and, in general, that a negative is only a positive quantity taken in a different sense.

The extraction of the second and third roots needs considerable elucidation from the teacher, and my practice in regard to it deviates, in some degree, from the mode used in most text books. I require the learner to write the powers, not only of binomials, but also of polynomials, the letters of which shall represent units of different orders, and to express them in their factors, so as to show clearly that, in each instance, the whole root already found, is to be doubled, or its second power tripled, as the case may be, for a divisor.

The binomial theorem is most easily taught according to the method of Bourdon or Lacroix; the latter however is rather difficult for beginners. After this theorem is perfectly understood, the learner will easily form a rule for extracting roots to any degree. He will see a beautiful

analogy in the methods adapted to the different degrees, or rather one general method applicable to all.

The best methods of constructing logarithms are found in the higher calculus; the general principle, however, may be easily understood. But in the use of the tables, too many are guided merely by rule, and of course are liable to numerous mistakes. Indeed I have never seen any algebra, which in regard to logarithms was, in all respects, adapted to young minds. The points which need most to be explained are the arithmetical complement and the logarithms of fractions, in such a form as to avoid negative characteristics.

In conducting the recitations in algebra, I may remark, that I do not allow the pupils to have their books open, but require them to take down the particulars of the question as read by the instructor. I have found this useful in awakening the interest and securing the attention of each individual of the class.

III. GEOMETRY.

This science is, in some respects, more satisfactory in its proofs than that of algebra, because the evidence of the senses assists and confirms the demonstrations of abstract reasoning. Still I am convinced, that a blind veneration for the ancients imposes upon this study many cumbrous shackles. An opinion exists in the minds of some, that analytical geometry is less demonstrative than that of the ancients. But for myself, with a knowledge of algebra, I do not see why correct reasoning, carried on by the aid of signs, founded upon data to which every mind will readily assent, should not give perfectly satisfactory results. Thus if a and b are the representatives of certain magnitudes, operations upon these symbols, correctly performed, must necessarily produce correct results; and if these

characters are used indefinitely, the result must be universally true, and consequently establish a general principle. I am therefore of the opinion, that the analytical method may be introduced in the elements more extensively than has generally been done, and hence an additional reason why algebra should precede geometry. I am confirmed in my opinion by the reply of a celebrated mathematician, to one who thought he had accomplished something great in the true style of Euclid; viz. "I can demonstrate all that upon my thumb nail; I advise you to study analytical geometry." I do not mean by this, that anything short of strict and rigid demonstration should be deemed satisfactory, but that many parts, such, for instance, as the theory of proportions, may, in a more concise and satisfactory manner, be taught algebraically than geometrically. Euclid's fifth book, containing from thirty to forty pages, may be all clearly demonstrated in two or three by any student acquainted with algebra.

In commencing this science, it is all important to begin well. Be sure that the learner understands the definitions and first principles. Good definitions are considered the most difficult part of geometry to write, but after the text book has been selected, the beginner should be very exact in regard to the phraseology; because, as the definitions and axioms are the data of the science and must constantly be appealed to, if misconception or inaccuracy of language be tolerated, confusion will often result. I have made it a point, therefore, to dwell upon this portion, until my pupils are perfect masters of it. Here also illustration is useful, and the beginner may be required, after having learned the definitions, to express them in different words, so that his teacher can ascertain, whether he has a true conception of their meaning.

Some have thought it advisable to dispense with many geometrical terms in common use, as perplexing to the

scholar, without adding anything to his stock of knowledge ; but terms that are convenient and express in one word a complex idea, are as necessary in science as the names of implements are in any mechanic art. A corollary, for instance, is said to be a consequence which follows from one or several propositions. Now this term is as good as any other, and after a few lessons, the learner will become accustomed to inquire, how particular truths are the necessary consequence of what precedes. Still an excessive multiplication of such terms ought to be avoided ; nor should they all be given at once, but only such as occur in one section or division of the text book.

Terms will not be completely understood until they shall have become familiar by application, hence the teacher should ask for the definition on a recurrence of the term. Some teachers think that no definitions should be given until there is immediate occasion for their use ; but when they occur thus occasionally, they appear to the scholar like incidental remarks, worthy of but little attention ; besides, they are less easily referred to, than when placed at the commencement of the sections in which they are first used.

In regard to the general method to be pursued in teaching, some excellent precepts have been left by Pascal, which I here translate.

1. " Never attempt to define anything so self-evident, that there are no terms more clear by which to explain it.
2. " Leave no terms undefined, which are in any degree obscure or equivocal.
3. " Employ in the definitions such terms only, as are perfectly known or already explained.
4. " Leave none of the necessary principles, however clear and evident they may be, without having asked whether they are admitted.
5. " Demand as axioms such truths only as are perfectly self-evident.

6. "Undertake to demonstrate none of these things which are so self-evident, that there is nothing more clear by which to prove them.

7. "Prove all propositions in any degree obscure, by employing as proof, only axioms perfectly self-evident, or truths already demonstrated or granted.

8. "Never pervert ambiguous terms, by neglecting to substitute mentally the definitions which restrict and explain them."

Among the definitions, that of the angle is most frequently misapprehended ; indeed I have known students pursue the science some time without any just conception of what is meant by an angle ; it is important therefore to illustrate this definition with dividers, or lines on the black board, so as to make it clear, that the magnitude of the angle depends wholly on the degree of inclination or opening of the lines. Carelessness in regard to the definition of the right angle also, often produces obscurity in the subsequent reasoning.

After the necessary definitions have been learned and illustrated upon the black board, the student may be permitted to engage in the succeeding demonstrations. And here, at the commencement, he must be strictly watched, to see that he clearly comprehends what is given, what is to be proved, and when he has proved it. It may be well for the instructor, to demonstrate a few of the first lessons at the time of prescribing them ; or at least briefly enumerate the several steps of the proof in their proper order. After enunciating a proposition, the student should be made to state, in his own words, the data and what is to be demonstrated ; and when he has gone through the proof, to recapitulate the successive steps of the reasoning. For instance, if two triangles have two sides and the included angle respectively equal, and it be required to prove the triangles equal, having admitted that coincidence establishes

equality, the learner should keep distinctly in view the parts that are given, and be made to see that, if a given side be applied to its equal, the other parts must successively coincide. In order to ascertain that the reasoning is perfectly understood, different parts having the same relation as before may be given, or the same proposition may be demonstrated upon a figure drawn on the black board and marked differently from that in the book. In that kind of reasoning, in which the equality of two magnitudes is established by the absurd consequences of supposing them unequal, he should be made distinctly to recognise, that, if a particular hypothesis leads to an absurdity, or to a contradiction of some previously demonstrated truth, the hypothesis must be false.

It is important that the learner be required to construct his figures. This may be done upon paper with a scale and dividers, or upon a slate or board, with a pencil or piece of chalk having a string attached to it. At first he must of course be guided in a great measure by the eye alone, but after having learned the problems, he may be required to construct the figures, according to correct principles of drawing. This will be productive of several beneficial effects. If he construct them carefully, it will accustom him to accuracy and neatness, which are essential in linear drawing. It will fix in his mind more effectually the data of the proposition. He will see that the mechanical operation is not susceptible of perfect accuracy, and consequently does not amount to demonstration; and that, although defects exist in his figures, they do not diminish in the least the force of the reasoning.

Also in performing the problems, which should all be actually constructed by the learner, everything ought to be done systematically, according to the instructions given for the several parts. I have frequently found, by pursuing the opposite course, and requiring of the student an explanation of the plate only, or by allowing him to con-

struct an extremely inaccurate and distorted figure, that when he attempted to draw correctly, he was wholly at a loss how to proceed. By this systematic mode of constructing, however, the pupil suffers one disadvantage, viz. the loss of that improvement of the eye and hand, which arises from drawing by their guidance alone. But this may be easily obviated ; for after the learner has become perfectly familiar with accurate modes of construction, he may be required to make his drawings as well as he can, without resorting to their aid ; and by being occasionally recalled to the correct method of procedure, he will be taught to remedy the defects of his eye and judgment.

Some writers, and particularly Lacroix, think it important that problems should follow immediately, the propositions upon which they depend, because then the proposition and its demonstration are fresh in the mind. But I see no necessity for this, provided that the theorems are properly referred to ; besides, it rarely happens that a problem involves but a single operation, so that in any case, a necessity for reference still exists. Reference moreover to a preceding proposition, if properly made, serves not only to recal the truth there proved, but also, in some degree, the process of demonstration. I see therefore no valid objection to placing the problems after the sections upon which they principally depend. Thus placed they are more easily found, when the learner is at a loss how to proceed in any construction.

Problems may be given to the learners in various parts of the course, different from those contained in the text-book, and they be left to solve them by their own ingenuity and their knowledge of the science. I have found this method very useful, as it excites a higher degree of interest than questions in which the operations are wholly explained, and makes the learner conscious of his own powers.

I have before expressed an opinion that proportions

should be taught algebraically, although some, among whom is Mr Young, a popular English writer, maintain that nothing but the geometrical method can prove the theory of them in all its rigor. But I must confess that, so far from seeing any essential defect in the algebraical demonstration, compared with the geometrical, I think it gives the student a better knowledge of the nature of proportions, and more effectually fits him for the work of investigation. All that relates to them should however be made as plain as possible. For this purpose I would have them written in the form of fractions and read as such. That a is to b as c is to d conveys but indefinite notions to the mind of a beginner, but the expression $\frac{a}{b} = \frac{c}{d}$ is perfectly intelligible to him who understands the nature of fractions. The learner should be made thoroughly acquainted with that species of equations which constitute proportions, and the various changes and combinations to which they are subject. If he is told that when two proportions have a common ratio, the other two ratios form a proportion, he seldom sees any reason why this is the case ; but after having recognised the axiom, that two quantities, each of which is equal to a third, are equal to each other, he readily perceives, that, if one member of one equation is equal to one member of another, the two other members are equal ; and I generally require it to be stated, that, because two of the members or fractions are equal or identical, the others are equal. Also when a proportion has been obtained the absurdity of which is to be shown, instead of saying, because the first term is greater than the second, the third should exceed the fourth, (or as the case may be,) I require the scholar to change the place of the means so as to make a fraction less stand equal to a fraction greater than unity ; the absurdity of which he immediately perceives, and hence the impossibility, that the hypothesis from which this absurdity arises,

should be true. In making changes upon proportions, although the student may be allowed to cite general principles previously established, yet he ought to be able to demonstrate them in the given case.

There is one portion of geometry which has given to writers upon this science much trouble and perplexity ; I allude to the theory of parallel lines, as it is called. Geometers generally admit, that this has never been rigidly demonstrated. Euclid demands as a postulate or truth to be admitted, that if two straight lines make with a third two interior angles, the sum of which is less than two right angles, these lines, if produced sufficiently far, will meet. Indeed it is one of those truths which can hardly be rendered more clear by proof. Legendre has given a solution which, if not perfectly rigid, produces entire conviction ; and indeed amounts to a demonstration, if we admit that two lines which constantly approach each other, will ultimately meet. In the later editions of his work, this author has pursued a different method in regard to parallel lines, by first proving that the sum of the three angles of any triangle is equal to two right angles ; but the demonstration is tedious and difficult for beginners, and is therefore rarely understood.

Some propositions require in their proof either the *reductio ad absurdum*, the method of indivisibles, or that of ultimate ratios. Reductios are sometimes tedious, but not always more so than other methods, and to a youthful mind, it is the most satisfactory, provided that it is fully understood. This however depends in a great measure upon the teacher. If he requires boys thirteen or fourteen years old, merely to repeat the words of the book, there is a strong probability that the force of the demonstration will not be perceived ; but by proper care and instruction, all obscurity may be dispelled and this kind of reasoning be made productive of perfect conviction. Suppose, for

example, it is to be proved that the area of a circle is equal to the circumference multiplied by half the radius. The learner must first be convinced that the product of two lines gives a surface, and this fact will have been communicated by the preceding propositions. Then the conviction follows that this product of the circumference by half the radius, must be the measure of the circle in question, or of a greater or less circle, the two last of which leading to palpable absurdities, the first remains incontestably true. Still, in cases of this kind, great care is requisite to see that the learner keep his hypothesis steadily in view, and have a clear perception of the dependence and connexion among the several parts of the demonstration. Now, if according to the method of indivisibles, the circle be considered as a regular polygon of an infinite number of sides, the truth would flash at once upon a mature mind, but to a youth, it would not seem rigidly proved.

The same precautions as those mentioned above, should be used in reductions relative to solids; particularly, the student should distinctly recognise, that a surface multiplied by a line produces a solid, and that such a product must either give the solid in question, or one greater or less.

It may be well, however, after the pupil has learned one species of demonstration, to give him a specimen of another, in proof of the same proposition. This will accustom him to the different modes of reasoning, more effectually prepare him for comprehending other treatises than those in immediate use, and enable him to make further advances in the science without the aid of a teacher.

In all the demonstrations of geometry, it is of the highest importance to require a reason for everything; that is, a constant reference to axioms or truths previously demonstrated; and a distinct statement should be made of the axiom or proposition employed. In referring to a previous theorem, it is not necessary to give the number of it, but

the figure, upon which it was proved, may be pointed out. Indeed the simple question, why? often repeated, is the best preventative against making this study a mere repetition of words, without any proper conception, on the part of the learner, of the force of the reasoning.

Models may be advantageously used in teaching the geometry of planes and solids; although I think that correct diagrams are sufficient, provided that the learner is made acquainted with a few of the simplest principles of perspective. On arriving at this part of the science, my practice has been to give some illustration of the appearances of objects under different points of view. Beginners are easily made to comprehend, that the most remote parts of objects appear most diminished; that a right line, viewed in the direction of its length, will seem to be a point; that a circle seen in the direction of its plane, is a straight line; and seen obliquely, it is an ellipse, &c. which simple notions will enable them to understand the plates.

While learning the demonstrations in geometry, it is important that the scholar should write his equations, proportions, &c. upon a slate or piece of paper. This will serve to give him a clear view of the successive steps, and of the order in which they should succeed each other; it prevents a rapid and confused perusal of the proof, and is one of the most effectual modes of committing understandingly the process of demonstration. Indeed in this, as in all other parts of the mathematics, the pupil should study with pen and pencil in hand.

With young persons reviews are very necessary to rapid and thorough progress. It is not sufficient that they once understood the proofs; many of the earlier portions of geometry are to supply elementary truths, or instruments, as it were, which are to be used in the succeeding parts. Now much depends upon our skill in the use and applica-

tion of these, and this skill is acquired, only when we are perfectly familiar with them. Besides, the learner rarely sees the full force of the reasoning on the first perusal, but by reviewing, truths which were before obscure or quite dark, burst upon the mind with new light. The reasoning powers are strengthened, the scholar comprehends more fully the force and nature of demonstrative evidence, acquires increased means of investigation, and advances with greater confidence in his own ability to conquer the difficulties with which he may meet. I have, therefore, required of my pupils a review of the preceding lesson in connexion with each new one; and, at the end of each week, a review of the week's study. This practice of reviewing serves also as a test to determine whether all the individuals of the division have studied understandingly; for, he who commits words without a thorough comprehension of the reasoning, will be almost sure to fail in the review of a week's work. I think it would be well if students were taught some of the principles of logic, previously to their engaging in the study of geometry, as they often commence this science without the least knowledge of the different modes of reasoning, or the kinds of proof applicable to different subjects.

When the learner is well versed in arithmetic, algebra and geometry, he is qualified to learn and understand trigonometry and its principal applications, such as mensuration, navigation, &c., which are sometimes comprehended under the title of topography; also linear drawing, analytical geometry, and if time and opportunity permit, the differential and integral calculus. He is now capable of engaging, with pleasure and profit, in the study of the different departments of natural philosophy. Mechanics, physics, and astronomy will be pursued with delight, and become productive of that ennobling and elevating effect upon the mind, which generally results from an acquaint-

ance with the wonders of the universe, when the student is accustomed to refer them to their Divine Author.

The principles of teaching the mixed are so similar to those for the pure mathematics, that details would be superfluous, even if time did not forbid an enumeration of them. It has been thought by some that very little of pure mathematics is necessary in order to understand natural philosophy. True, a great many facts may be learned by experiment and illustration, and many others from the mere assertion of authors ; but in my opinion, any knowledge of a science which admits of demonstration, is extremely superficial, if acquired otherwise than by this kind of proof. It is true also, that many of our mechanics, engineers and navigators, by following their rules, work, in most cases, correctly ; but mere routine without an understanding of the reasons for the operations, confines the energies of the mind, circumscribes the inventive genius of man, and often leads to fatal mistakes.

It is proper perhaps that I should make a few remarks on the progress of mathematics in this country, and the books most in use. Fifteen years ago, the study of mathematics among us, with the exception of geometry, consisted principally in the application of a set of rules. These afforded no evidence to the student that they were not perfectly arbitrary, except that if he was so fortunate as to apply them correctly, he obtained the answers subjoined to the questions.

Of the works which have served to introduce a better method of studying mathematics, are the Cambridge course, principally translated from the French, and Colburn's works. There are many other works of no inconsiderable merit, but I have selected these, because, in addition to their intrinsic worth, they have taken the lead in raising the standard of scientific studies. Among those prepared for the College, Legendre's Geometry stands pre-eminent.

Indeed, I know none which, for clearness, order, and the convincing nature of its proofs, surpasses this. Euler's Algebra, and Lacroix's Arithmetic and Algebra have much merit. The same may be said generally of the other parts of the course. Some deficiencies and redundances indeed exist in these works, but a judicious and well qualified teacher will be able to modify the course of instruction so as to suit almost any class of learners. The principal changes to be desired in Legendre, are, that proportions be written in the form of fractions and read accordingly, and that in some cases the converse of propositions be supplied.

The improvement arising from the introduction of this course at Harvard University was great; it contributed much to the interests of the Institution, and did honor to the gentleman by whose labors and talents it was effected. It is, therefore, with regret, that I see some of the best works of the course rejected, and others of less merit substituted in their place. Whether this change be owing to the opinion of those who have the direction of the studies, that the works substituted are really preferable to those displaced, or that the latter are too difficult for the students, I have no means of judging. But in regard to the former supposition, others may honestly differ from them in opinion; and in regard to the latter, I will merely say, that if boys thirteen years old can learn these books, there seems to be no reason why the students of Harvard College should be inadequate to the task.

No man among us has contributed so much to a correct method of studying mathematics as the lamented Colburn. True, his method was not wholly original, as he has followed the general principles of Pestalozzi; but I have no hesitation in saying, that his books are not only the best in this country, but, so far as my information extends, the best in the world. The First Lessons are above all praise. The Sequel admits of some improvements, and such the

author has left in manuscript, which will probably be published. Some object to this work, that it is overloaded with examples for practice ; not reflecting that facility and rapidity are highly important in arithmetical operations ; and that it is much easier to omit superfluous examples than to supply new ones. In the Algebra, I can object to no part except the binomial theorem, of which the author gave an original demonstration, and from this circumstance, his own would appear to him more simple and intelligible than any other mode. But for myself, I prefer the more concise method of Bourdon, which, I think, may be perfectly comprehended even by boys. All of these works are, however, excellent in their kind, and objections to them, wherever they exist, have arisen, I believe, from the ignorance, indolence, or prejudice of teachers.

Of Mr Colburn as a man, a friend, a husband, a father and a Christian, perhaps it would be out of place for me to speak before this assembly. But I crave the indulgence of the single remark, that for warmth of affection, devotedness to his family and friends, purity and simplicity of mind, high moral and religious principle, ardor and perseverance in philanthropic exertions, he has been surpassed by few. As a man of science, his talents were of the first order ; his inventive powers were considerable, and his reasoning clear and comprehensive. In the death of Mr Colburn, our country has lost a benefactor, and science one of its brightest ornaments.

LECTURE VI.

ON

THE DANGEROUS TENDENCY

TO

INNOVATIONS AND EXTREMES

IN

EDUCATION.

· BY HUBBARD WINSLOW.

INNOVATIONS IN EDUCATION.

EDUCATION comprehensively considered presents a subject of vast magnitude and of transcendent interest. We are instructed that no subject more deeply engages the mind of God. The training up of his intelligent offspring to honor and immortality, is his greatest and most benevolent work ; and to co-operate with him in it, while the most useful and honorable, is yet the most arduous and difficult of all human employments. We should therefore be slow to censure those engaged in it ; remembering that it is easier to criticise than to execute ; to find fault with others than to do better ourselves. It were unreasonable to expect that the difficulties of education are to be surmounted without some abortive and dangerous innovations and extremes.

But the precipitous movements of the present age seem to have multiplied them to an extraordinary degree ; inso-much that we rest not upon one point long enough to make a fair experiment, before we fly to another. Indeed innovation seems to be the prevailing spirit of our age. It is not restricted to this country, or to the subject of education. A large portion of the political, civil, and religious world is partaking of it. Ancient dynasties are crumbling ; political maxims are revoked ; venerable authorities are laughed at ; established principles are contested ; civil

institutions are overturned ; organized systems and measures, which have survived centuries, are broken up ; and the whole framework of society seems to be in a progress of revolution. It is the reaction of an opposite extreme of a past age, and the vibration is tremendously strong and deep. Extreme jealousy of personal rights, and a consequent extreme idolatry of personal opinion, are inducing multitudes to act irrespectively of superior rights and to despise the opinions and maxims of their fathers.

Doubtless there are beneficial tendencies in these convulsive movements ; but there are also some baneful tendencies, demanding strenuous resistance. There is danger lest in our zeal to cast away what is bad, we cast away the good with it. On no subject does this danger press more directly than on that of education. The cause of education, being eminently popular, sympathises very deeply and extensively in the prevailing spirit of the times ; and those to whom its interests are entrusted are under strong inducements to yield to the popular impulse. By innovating upon doctrines and practices tested by long and wise experience, and by pushing out supposed principles to the extremes of ultraism, instead of conducting the human mind steadily forward towards the goal, they will only send it round in a circle of revolutions.

It is a most rare and enviable wisdom, to retain all that is valuable in antiquity and to relinquish all that is useless,—to so chastise our associations, as discreetly to disconnect the gold from the dross accumulated in the mines of past experience, and, by availing ourselves of whatever enricheth, and disengaging ourselves of whatever encumbereth, press forward to greater attainments. There is a wise medium between the extremes of a servile admiration and a reckless contempt of antiquity. The one prevents the aggressive movements of mind, by chaining it to the past and rebuking elementary thinking ; the other neither en-

riches it from the past, nor carries it forward to future discoveries, but keeps it continually revolving and sinking in the whirlpool of its own independent and furious conceits. He who sets forth on the perilous future uninstructed by the past, will ultimately land, not in advance of his age, but in a pit of oblivion somewhere beneath the point whence he started.

The study and experience of several thousand years have not been entirely in vain. They have developed some facts and established some principles in respect to education, which must be practically recognised in all successful attempts to improve the human race. Hence wise men are slow to embrace new doctrines, and prompt to reject those subversive of well established principles; nor are they in haste to reduce theories to practice, not well sustained by the experience of past time. Not unfrequently it happens that enthusiastic and conceited minds, leaping after novelties, and walking only in the sparks of their own kindling, instead of guiding their course by the strong light of history, after long and weary labor have been mortified to find that they have made no valuable progress. The ground over which they have passed had been trodden by others, equally in vain; the beacons which they have erected by the way at great expense, had been erected by other minds ages before, and subsequently demolished by minds still wiser.

It is no slander, but common-place truth, to say, that the present is not an age of deep, strong, thorough thinking. Of profound study there is great impatience. Calm and solemn inquiry is rare. The mind of this generation is restive, feverish, impassioned, and consequently prone to a reckless radicalism. The venerable locks of antiquity, whitened with the frost of nearly six thousand winters, have been torn off by some ruthless hand, and childhood has become emboldened to say, "*Go up, bald head!*"

The tendency of this spirit of innovation is, to unsettle important principles and set everything afloat upon the capricious tide of popular feeling. Let us briefly notice its bearings upon the subject of education, which for convenience we divide into physical, intellectual and moral.

I. PHYSICAL EDUCATION.

This is deservedly engaging much attention, and we are not sparing of anthemas upon antiquity for neglecting it. Still it is desirable that the public be more extensively and definitely enlightened, both in respect to its object and its mode. To the views usually maintained in that excellent work, the *Annals of Education*, the speaker most cordially assents as sound and valuable. Temperate and judicious exhibitions of the nature and importance of physical culture, are timely and important; but the ultra notions are becoming prevalent, that large physical developement and high toned physical energy constitute the substratum of mind, and are essential to the loftiest intellectual achievements. Hence the abundance of declamation and loose remark upon the importance of gymnastic exercise. At some of our schools and colleges gymnasias are constructed for the express purpose, it would seem, of educating the muscles. Other literary institutions embrace a system of manual labor, laying under demand a considerable portion of their pupils' time. As though great strength, agility and magnitude of the physical system were essential to the student's object, the doctrine is becoming popular, that he who would aspire to long life and intellectual eminence, must make a large sacrifice of time and attention to the same kind of discipline with those whose employment for life is to be physical labor.

As far forth as systems of manual labor in connexion

with literary institutions can subserve needed pecuniary ends, they have their importance ; but their ultimate and prolonged success is questionable. That so much of the exercise and strength of the laborer should be put upon the student, as the modern doctrine teaches, seems to be against both nature and experience. Even *a priori* reasoning would teach us, that if God has intended a division of labor, he has so constituted the human system that it may be trained to different pursuits. All mankind are destined to some degree of mental cultivation ; but he who is to be *professionally* engaged for life in intellectual pursuits, must be as far as possible *totus in illis*, and must therefore train himself to the least physical necessities and to the greatest and most continued intellectual effort practicable, leaving the more special cultivation of sinews and muscles to those who have a more special use for them.

The calling of the laborer is as honorable, useful and important as is that of the student, but these two callings do not require the same kind of training, either physically or intellectually ; nor is the physical system of the student to be kept in the same condition with that of the laborer, any more than the intellectual system of the laborer is to be kept in the same state with that of the student. Man was not designed to be a *fac totum*. Let so much of his time, thoughts, and feelings be expended upon his physical cultivation as is requisite to develope all his physical powers in their utmost strength and luxuriance, and so much goes to the animal that ordinarily little goes to the intellectual. That physical perfection is not essential to mental eminence, is evident from the fact that men of the most distinguished minds have even usually had a thorn in the flesh. We may go still farther and assert, what may seem unpardonable heresy, that there are some reasons for believing that Paul, Plato and Demosthenes, Newton, Baxter and Hall even owed a portion of their eminence to their physical

infirmities, nerving them to higher intellectualization, rendering them less sensual and more spiritual.

The ancient Grecians and Romans excelled in physical culture ; but what of their wonderful models of the human frame, handed down to us by the chisel and the brush ? Noble boxers, wrestlers, racers, leapers, mighty in all feats of physical prowess, they were ; but which of them contained intellectual minds. As a general fact, their distinguished *minds* were of another class. Nearly the whole galaxy of Grecian and Roman scholars, who shed the everlasting glory of intellect upon their nations, were unknown in feats of prowess, and are most of them recorded to have been men of rather slender physical development or of some bodily infirmity. Modern biography speaks to the same point of the long catalogue of German, French, British and American scholars. Two of the most distinguished poets and theologians, were much indebted for their greatness to the want of eyes. The brightest and most exuberant sanctified intellect that ever honored America, inhabited a feeble body, of calm and uniform but never high health and almost no activity, being from twelve to sixteen hours every day in the study. Had Socrates and Virgil given their time and their interest to the cultivation of their physical powers, as did the wrestlers and boxers, they would not have become the philosopher and the poet which they did. The intellectual acumen of the one, and the fine sensibilities of the other, would have been wanting. Had Newton and Edwards devoted four or five hours a day to physical labor, they would never have pushed their minds as profoundly as they did into the kingdoms of natural and mental philosophy. Those students who bear the palm in gymnastic exercises, are usually the poorest scholars. Famous at the trencher, they are dull at study. Strongly given to the animal, they are seldom eminently intellectual.

The history of mind seems therefore to have established the principle, that the physical system of the professional student should be educated *not* as that of the laboring man. He should have a more intellectual, or, as Paul might call it, a more spiritual body. He must *keep under* his body, and bring it into subjection to his mind. In examining the histories of eminent scholars we find, as a general fact, that instead of lusty dinners, attended with several hours a day of physical labor, to amplify and ennoble the stomach and the muscles, they *diminished* their physical demands; they practised severe but prudent abstinence, they tempered and subdued their animal lusts, they rose early in the morning, they ate little, slept little, thought much, they cultivated philosophical and cheerful habits of mind, they devoted a large portion of their time, in some way, to intellectual and moral cultivation; they gave that kind and degree of attention to the body, which would render its condition most easy, its necessities fewest, and its habits most accommodating to the mind.

Exercise and recreation are important to the student, but they should be such as to improve and interest his mind, while they benefit his body. Botanical, mineralogical and geological excursions; exploring the curiosities of nature; occasional unbending with music and the fine arts; a morning walk with Thomson, and a little of the elixir of good living society, with strict temperance and a cheerful temper, may usually serve him the double purpose of at once sustaining his health and enriching his mind. The great evil is, that most students in our schools and colleges are totally ignorant of the laws of life, and know not how to regulate their diet, to graduate their exercise and to form their habits as students ought to. Were half the time and expense bestowed upon the erection of gymnasia and work-shops given to support an experienced, scientific, wise lecturer, who should visit our literary institutions and

instruct their pupils *how to live*, it is confidently believed that we should have more scholarship and less dyspepsia.

We are no advocates for asceticism and a studied corporal attenuation, and certainly we would not wittingly insert or cultivate thorns in the flesh ; — they usually come fast enough of themselves. We would rather so bring the body into subjection, as to render them unnecessary. We care not how comfortable the student's accommodations, how spacious and airy his room, how commodious his desk, whether he sit upon a naked bench or a cushion ; we would only have him avoid notions and extremes, think as little of his body as possible, and adopt the simple style of living appropriate to his calling. As to that all important organ, the stomach, the seat of life and sensibility, the source of so much joy and sorrow to man while man is mortal, we consider it a blessed ignorance if no symptoms shall ever admonish him that he has one.

But public attention is now directed from the stomach to the head. The craniological fever is on, and will have its run. Blessed is the man now, who has a fine skull ! Any novice, who has just taken a peep into anatomy and physiology and their vital connexion with mental science, who has read Bichat, Broussais and Combe, but especially Gall and Spurzheim — can determine the intrinsic phenomena of his neighbor's mind, with the place and manner of its growth ; and, by ocular and sensible demonstration, can reveal its character and size, with an assurance which will surprise a future generation. The venerable doctrine of heathen India, that the intellectual and moral fate of every man is written in the sutures of his skull, is springing up among us with the pretended charms of novelty, though somewhat disrobed of its oriental beauty. Phrenology, thoroughly studied and understood, unfolds some interesting general facts, but the present charms of its details are adapted to fascinate animalized minds of fanciful

temperament, rather than minds of a severely intellectual and scientific character.

Allowing brain to be the organ of intellectual operations and membrane of sensibilities and moral affections, which we believe to be sound doctrine, or admitting the more popular doctrine, that all the operations of the soul have pitched their tent together in the head, is not the quality and condition of brain as important as the quantity and shape? The vigor of the hepatic secretions does not depend so much upon the shape and size of the liver, or of the ductus choledochus, as upon its quality, its healthfulness, its right condition in point of adaptedness to other related organs. So of all the physical organs and functions, in their relations both to the body and to the mind. So many facts and circumstances, not obvious to external inspection, are connected with their vigorous or feeble operations, that we are slow to forestall our judgment of men by the appearance of their heads, or any other external marks. With becoming deference therefore to the sublimely important and interesting sciences of craniology, ophthalmoscopy, nosology, physiognomy, gastronomy, dermoidonology and myonology, all of which have found their advocates and are entitled to their day, which afford amusement, and help the confident to know and the wise to guess, we must still be allowed, when we would sit in sober judgment upon men, to adhere to the good old fashion, and judge every man mainly according to his deeds; and not by the volume or protuberances of his cranium and the height and majesty of his forehead; or by the shape, magnitude and polish of his eye; or by the contour, elongation and luxuriance of his nose; or by the configuration and cast of his face; or by the periphery, diameter and longitude of his perigastrum; or by the complexion and texture of his epidermis; or by the strength and rigidity, or the feebleness and beauty of his muscle.

II. INTELLECTUAL EDUCATION.

Probably nothing will be gained by a resurrection of the old question of the schools, whether the mind's original and elementary knowledge is innate or intuitive. The following practical principles are established, that it is the chief object of intellectual education to discipline the intellect, that this can be done only by severe thought and study, and that the best materials for these lie in the kingdoms of mathematical, physical, and moral science, and of language and logic.

As we estimate a merchant's education, not by the amount of his wealth, but by his skill to obtain it ; and as we estimate a mechanic's education, not by the quantity of his materials, but by his dexterity to work them into beauty and utility, so do we estimate a scholar's education, not so much by his stock of knowledge as by his ability to explore, originate, and wisely use it. To this ability, there is no short and downy path. Nature may be more generous to some than to others ; but as no man's body, however felicitously formed by nature, can become strong without exercise, so of his mind. Indolence, indulgence, and dainties can never give dexterity and strength either to body or mind, however blessed of nature.

Innovation is replete with devices to avoid severe study, to mark out some expeditious and royal road, and to make precocious exhibition of large and splendid acquisitions of popular knowledge. The consequence is a luxurious growth of mushroom scholars.

Commencing with the early stage of education, we often find pupils pushed forward unprepared to future studies — learning history, geography, grammar and rhetoric, before they have learned to spell and read ; making a display of algebra and geometry, before they have learned vulgar arith-

metic ; launching into natural philosophy, before they have learned the pure mathematics needful to a scientific pursuit of that study ; and sometimes passing off a flippant exhibition in Latin and French, while profoundly ignorant of the grammatical alphabet and rules of those languages. Ascending to the higher institutes and colleges, we find some of them expunging a part of the regular course. Some would dispense with the more knotty and useless mathematics, others with the dead languages ; others would leave the course optional with the student, like leaving the direction of a ship optional to a novice on unexplored waters ; others would substitute lectures for study, all aiming to accommodate the popular taste, and to effect the same desideratum — scholarship without study.

There is perhaps some apology for teachers, if in the age of rail-roads and multifarious abridgements of labor and time, they come in for a share of the improvements. We should therefore be as forbearing as possible towards the substitution of mere lecturing for teaching, and the various forms of Lancasterian instruction in the place of personal attention. But as we have no rail-roads to the temple of science, and as thorough scholars are not made by proxy, we must be allowed to express our dissent from all innovations upon the immediate and laborious contact of the mind of the teacher with the mind of his pupil, and our conviction that no school ought to contain more pupils than the teacher or teachers can give personal and sufficient attention to.

There is also a modern adaptation of books, to the disastrous convenience of both teachers and pupils. Everything, to use a homely figure, is cut and dried to their use, chasms filled up, difficulties explained, inferences made, ingenuity forestalled, questions and answers all prepared, lessons to be learned by nothing but memory and answered with parrot tongue. For the same reason that he is a bad

teacher who does not tax the patience and ingenuity of his pupil, is that a bad book, which so explains and facilitates as not to call for the exercise of discretion, invention, and judgment, as well as of memory. Indeed we have too many books of every description, adapted to please rather than to profit.

The plan of teaching, to a great extent, by visible signs, plates, figures, machines, has its facilities; but beyond a moderate limit its utility is questionable. It may help the mind to a more easy and distinct view of its object, but does not throw it upon the resources of its imagination, and compel it to patient, sustained, vigorous abstraction. There are numerous subjects in the higher kingdoms of science, which do not admit of visible illustrations; and the pupil who forms the habit of depending upon them while passing through the lower, will find it difficult to go alone through the higher. The imagination cannot command mature and well balanced wings, the moment they are needed; they must be cultivated and exercised from the first moment the mind begins to move. Moreover, the most important part of mental discipline and that at present most defective, is the power of abstract thinking and generalization. Many scholars with heads full of lumber, for want of this power never turn it to any valuable account.

It cannot be disguised that we have too much servility to popular taste, too many novelties and experiments, too many plans and contrivances to accommodate indolent ignorance, too much light reading and too little study, to raise up a generation of great original intellects.

The evils of this superficial kind of education are many and serious, affecting both the learned professions and the general classes and interests of society. Under its influence, preaching becomes either intolerably stale and common-place, or degenerates into fiery declamation, loose harangue, and a constant marshaling of startling thoughts

and bold figures ; devoid of that unique, logical, consecutive course of rich thought and argument, which gives solid edification and permanent interest. That we have so few eminent lawyers and civilians, is not so much because only a few have by *reading* amassed legal and civil knowledge, as because so many have failed to secure *by study*, that discipline which enables the mind to use its knowledge to purpose. The same remark applies in some measure to the medical profession. One great reason why so many in every rank and calling are governed by excitement, are thus fluctuating, capricious, the tools of demagogues, is, that they have never been taught to *think*. They can read, feel, talk and act ; but to study, deliberate, and wisely judge, they know not. If we would save our literature, the honor of our national intellect, our institutions and our country, we must adhere to the good old doctrine — NO SHORT AND ROYAL ROAD. Patient and prolonged application, is the only means of a sound intellectual growth. Parents and guardians must be more jealous of those measures which profess to obviate the necessity of so much study ; remembering that thorough education is a work of time. It makes no brilliant displays of knowledge at first, but eventually secures the palm.

III. MORAL EDUCATION.

This is undoubtedly among the most important of subjects, involving all temporal and eternal interests. So momentous it is, and so fraught with hazards, that God has taken to himself its supervision and issued special laws and instructions respecting it.

Moral education, is carrying into effect the divine government over accountable minds. All dangerous innovations in this department, are evasions of the thorough discipline enjoined in the Bible. Our noble ancestors made the

Bible a school-book, and insisted upon its authority in the government of their schools and families. But we have nearly banished it from our schools, and many of us even from our families, at least as supreme authority in the training of our children ; inculcating what we consider a more humane, enlightened, refined system of government. Indeed it is even proposed, and the experiment is in progress to reduce all government to mere *persuasion* ; at least, to annihilate all physical chastisements.

The Bible predicates indispensable virtues of the rod ; but we are for casting it aside as a relic of barbarous ages. In the Bible we read something like this — “ The rod and reproof give wisdom. Chastise thy son while there is hope and let not thy soul spare for his crying. Foolishness is bound in the heart of a child, but the rod of correction shall drive it far from him. He that spareth the rod hateth his son.” But we are for maintaining that he who *useth* the rod, hateth his son, and would fain convert that efficient instrument into an oriental metaphor ! But how could the figure have the place and meaning which it has in the Scriptures, without the existence and use of the *real instrument* whence it was taken ?

The foundation of regeneracy and a religious character or the reverse, is usually laid in childhood. The principles on which God conducts towards the subjects of his government, should be practised upon in the conduct of parents and teachers towards children. The earthly parent sustains to his infant children, in many respects, the place of their Heavenly Parent ; he is pro-tempore their supreme moral master ; and hence the principles with which he trains them, should be those with which God will meet them, when they come to recognise themselves as subjects of his government. Deviation from this will be followed by disaster.

If the parent does not subdue his children to his autho-

rity, but allows them to have their own will, when the parental is transferred to the divine government they will still claim the same indulgence. Thus have they been educated ; and will the Ethiopian change his skin ? If he trifles with their misconduct and passes lightly over it, he prepares them to consider all sin as a small and venial offence, and to disbelieve the great sacrifice which it has cost. If he practises threatening without executing, he teaches them to despise the threatenings of God and disbelieve future punishment. If he fails to teach them the importance of a wisdom superior to their own to guide them, he trains them up to despise the wisdom of God and discard the Bible. It might thus be shown, that all the essential doctrines and precepts of religion, or their opposites, may be inculcated upon the mind and moulded into the habits of children ; and

“ Just as the twig is bent, the tree ’s inclined.”

And even if some children subsequently surmount the disastrous effects of early bad training and become religious, their early formed evil habits will be besetting sins and retard their Christian growth through life. Falsehood, deception, idleness, sensuality, lust of money or praise or power, will hang round them all their days, and will be like lead upon their wings when they would rise, and render what had otherwise been sound and vigorous, maimed, and feeble Christians. Thus prolonged is the influence of early training, for good or for evil.

Children left to their chosen way, are left to ruin. Hence the first step towards their salvation is, to control their *choice* ; that is, to subdue their *wills* to rightful authority. What then shall we say of a strange notion of modern time, that we ought not to subject their wills, lest we enervate their characters and render them tame and spiritless ? Is this divine wisdom or human ? Now the fundamental

motive to obedience is *fear*. Other powerful motives operate, but all are ultimately *sustained* by this. Take this away, and all other motives lose their efficacy. Hence the first practical lesson for children is, that transgression is followed by punishment. If they *sin*, they will *suffer*. There are two methods of evading this ; the one partial, the other total. The first is, by instructing them that transgressors receive from nature all their suffering as they go along. This is a total evasion, since they consent to whatever of inconvenience they experience from their sin for the sake of its pleasure. They make an unwise choice, but still they are pleased to make it. The other evasion is, by instructing them that the penalty of sin, though not all experienced at the time, is made up by subsequent rebukes of conscience. It is important often to turn the attention of children, as well as of men, to the inherent miseries of sin ; but all attempts to sustain the authority of moral government by this means alone, will fail. They overlook the important fact, that sin directs its desolating blow outward upon the community, and that consequently the government which protects the public interest must send back the penalty. So does the divine government, so do good civil governments, so do good school governments, so do good parental governments. It is thus, that the rod and reproof give wisdom, — teaching children what they are to expect forever under the righteous government of God. If they will inflict evil upon the government under which they live, that government will inflict evil upon them. With the merciful it will show itself merciful, with the upright it will show itself upright, with the pure it will show itself pure, and with the froward it will show itself froward ! This is the true doctrine. Teach your children any other, and they will probably bring down your gray hairs with sorrow to the grave.

It is notorious that indulged children become hard-

hearted, ungrateful, cruel to their parents in advanced life. There is no true and abiding love towards a parent, where there is not genuine respect for authority. They first condemn his authority, then despise him, then hate him, then resent, disregard and abuse him. They claim it as a *right* to have their wishes gratified ; they revenge refusal. Why should they not ? They are but carrying out the principles in which he has educated them. Their parent has taught them so. He has not trained them up in the way they *should* go, but in the way they *would* go. He has suffered human wisdom to reverse the mandate of divine. He has accommodated his government to their selfish wills, instead of subduing those wills to rightful authority. The consequence is, a continued and growing misunderstanding and variance between them and the authorities over them ; first between them and their parent, then between them and their teacher, then between them and their Bible, then between them and their God, and this breach gradually widens and deepens to an impassable gulf.

We would not advocate unfeeling severity, or even the infliction of a single pang uncalled for by the best ultimate interests of the children corrected. Especially would we have no chastisement inflicted capriciously, or in any other spirit than love, tenderness, gentleness and yearning towards the suffering offenders ; even as God yearns over sinners when he chastises them. If needed chastisement be judiciously and thoroughly administered in early childhood, followed by a steady course of government, it will seldom need repetition. But this is not done at home, to the extent to justify the universal banishment of corporal chastisement from our schools. Some escape through the inadvertence, or blindness, or imbecility of their parents ; while others possess that infelicitous pertinacity of spirit in evil doing, for which nothing is an effectual antidote, but severe and *repeated* doses of the birch.

And surely, when we behold the Almighty bending over the world with his burning rod, when we see the evil of sin written as it were upon the very face of the angry skies, when we read the awful penalties of the divine law, and when withal we witness the desperate strength of human frowardness, and hear God calling upon us to apply the principles of his government to its early correction, we are not left to doubt, that in the business of moral discipline we have something more to do than to persuade, to flatter, to coax, to hire children to do their duty. Leviathan is not so tamed. Satan is not thus cast out; he is only kept good natured till he has time to grow.

Let an axe early be laid at the root of sin. Let the frowardness of children be thoroughly subdued. Let the requisite punishment press so instantly and uniformly on transgression, as effectually to convince them that the way of transgressors is hard. Let this be done to the extent, and only to the extent, of completely subjecting their wills; and this point gained, let it be firmly maintained. Let the hold of their wills on transgression be thus broken, and their minds rendered accessible to the motives of duty and love; let this be attended with wise counsel and followed by a steady government, and they will not fail to walk in wisdom's way. With such training, they will come forward to meet the responsibilities and circumstances of their existence.

They will be prepared to justify God in all the rebukes, chastisements and disappointments of the present world, and in the everlasting penalties of his righteous law, in the world to come. They will have learned that for their sins they deserve them all. They will feel the value of mercy and their need of it, and welcome with penitential gratitude the overtures of redeeming grace. They will be affectionate, dutiful, faithful, patient of sufferings, grateful for favors, afraid only to do wrong and bold only to do right; beloved by their teachers, ornaments to their families, bles-

sings to society ; their entire characters rising, expanding and shaping to the high and holy government of God.

Let us beware then how we innovate upon those principles of moral government, which are inculcated in the Bible and by the experience of past ages. The effect must inevitably be to loosen the hold of the divine government upon the rising generation, to introduce licentious doctrines, to undermine the foundations of religion, and ultimately to bring forth upon our nation an army of infidels, radicals, revolutionists, who will neither fear God nor regard man. If we would avoid this, we must walk after the example of our pious ancestors, whose blessings we inherit. **WE MUST GIVE TO THE BIBLE SUPREME AUTHORITY BOTH IN OUR FAMILIES AND SCHOOLS.**

Nor is the power of the Bible to enlarge and ennoble, as well as to govern the mind, unworthy of notice. The human mind tends to expand to the greatness or contract to the littleness of the objects of its contemplation and pursuit ; and of all the sources of magnificent objects to engage its attention, the Bible is transcendently the richest. —The birth of creation, the formation of man in the divine image, the temptation and fall, the descent and incarnation of the Son of God, the stupendous sacrifice for sin, the recovery of fallen man to lost righteousness, the kingdom of redemption rising from the ruins of the fall, the continual march of providence towards the final consummation, the conflagration of the world, the great white throne before which heaven and earth flee away, the judgment seat of Christ, the everlasting destinies of the righteous and the wicked ! — what objects vie with these, to expand and energize the mind ! The revelations of modern astronomy, amplifying stars to suns and worlds rolling in space with lightning speed, and all presumed to move in stately attendance around some distant central throne, bear but humble analogy to the revelations of moral grandeur made

in the Bible. Would you rouse the youthful mind to noble thoughts and burning aspirations, pour into it these sentiments. Early teach it to transcend the bounds of time, ascend into the regions of immortality, expatiate prospectively in higher worlds, learn its alliance to superior orders of intelligence and its solemn accountability at a righteous tribunal. These lessons of instruction are from the exhaustless fountains of eternity. They will continue to flow as from a well-spring of perennial life, when all the sources of natural science shall be dried up.—When the stars shall fall like autumnal leaves, and the heavens be rolled together as a scroll, and the earth and the works therein shall be burned up, they will still survive in the mind to enlighten and bless it. If then we would secure to rising generations the fairest promise of useful eminence in the present world, and of everlasting glory in the world to come, LET US DO ALL IN OUR POWER TO GIVE THE BIBLE SUPREME DOMINION OVER THEIR MINDS.

LECTURE VII.

ON

**UNITING IN A SYSTEM OF EDUCATION,
MANUAL WITH MENTAL LABOR.**

By BERIAH GREEN.

THE following lecture was prepared for the Institute, but circumstances prevented its delivery during the session.

MANUAL AND MENTAL LABOR.

ON the subject of uniting in a system of education *manual with mental labor*, I am quite willing to offer a few plain thoughts. The deep interest I may betray in the matter, I am here invited to dwell upon, I hope will not be too eagerly ascribed to my relation to an institution, where such a system of discipline is maintained. For such a feeling, I can give a better reason, than is to be found in any station, I may be called to occupy. And that reason, as it is connected with the object, which has brought me to this spot, I shall venture lightly to touch upon.

By a round of efforts, which I need not here describe, my health became too much impaired to allow me to perform the duties of the private student or public teacher. The nervous system was sadly deranged. A sitting posture, long retained, produced sensations, which I know not how to describe, which I found too distressing to be quietly endured. Something at my breast bade me get up and bestir myself; or I must expect to be torn in pieces and scattered to the winds. My eyes were large sharers in the general trouble. They shrunk from a close and continuous attention to the printed page. When suddenly called in a clear and strong light, to pass from one object to another, I know not what strange illusions started up before them ;

—illusions, now claiming to be flies, now small pieces of torn gauze, and again, fragments of a floating cobweb. And then my hand, while guiding a pen, soon grew weary of the office. All this was disagreeable enough; and to a poor man, with a wife by his side and a babe in his arms, afforded rather a dull prospect, whether of usefulness or comfort. When dreaming, I sometimes seemed able to read; but my joys ended with my sleep. At length I resolved on an experiment. I took a book into an unoccupied shop; and, placing it on a bench near at hand, wrought a while at a lathe. Warmed by the effort, I turned to my book, and was able to keep my eyes upon it perhaps, a single minute. I passed from the book to the lathe and from the lathe to the book, until I had read by snatches, a considerable part of an octavo page of easy Latin. I had now entered on what has proved to me, a most interesting and important experiment. About the same time I began by short tasks to try my strength in public speaking. In both ways, I was gradually able to increase my efforts; when after a few months, to my great joy, I found myself strong enough to study the term of twenty minutes without pausing. I now took a pulpit to occupy every Sabbath. Besides longer terms of exercise, day by day, for every twenty minutes' study, I spent fifteen in muscular exertions. These exertions were almost uniformly made with the axe; and with a good deal of life and energy. I persevered in this course with a solicitude, constancy, and force, amounting almost to scrupulosity and obstinacy. In the midst of trials and apprehensions, I gradually gained ground. I ventured by slight additions, from time to time, to increase my terms of mental labor; till at length by a slow and painful process, I became what I now claim to be, almost half a man!

Now, had I, on some happy method, from the first combined manual with mental labor, I believe I should have

escaped the evils with which, year after year, I have had to contend. The solicitude and strength I have been forced to expend in keeping my head above water, it seems to me, I might in that case have laid out for higher purposes. May God forgive my sin in neglecting and abusing the constitution He committed to my keeping; and teach me to make the most of the shattered remains of it, which I am still intrusted with!

For one, I own I am against exposing the unpractised student to the slough, into which so many of us, heedlessly and *unwarned*, have plunged. Alas, how many have already sunk to rise no more! How many are now desperately struggling with the miry clay! How very few will ever get clear of the effects of the sad fall, they have experienced!

To unite manual with mental labor in a system of education, ground and facilities for carrying on agricultural and mechanical operations should be furnished. With one hundred students, we ought to have a farm of at least one hundred acres of cultivated land. This should be made to contribute as directly and largely as possible, to the support of the common table. A larger garden should not be enclosed, than the wants of the kitchen may require. Gardening as a general thing, is poor business for the student. He may as well keep digging Greek or Hebrew roots, as to crouch over a bed of onions. Away with a kind of exercise, which hinders the free circulation of the blood; — which keeps one's head so near the surface of the ground, as to make one faint and dizzy. Besides, the sale of garden vegetables even near a city, costs too much time and pains-taking, to be consistent with the interests of a public school. — Land good for grass and Indian corn should be had; and to such crops, it should chiefly be devoted. Potatoes should not be excluded, as not a few will be called

for in the kitchen. But in such an establishment, they can hardly be raised for the market to much advantage. They are heavy, dirty, and must be speedily disposed of. If you try to keep them through the winter, you must submit to more labor and hazard in doing so, than is either agreeable or useful. — A herd of cows, as large as may be, should be kept. His need of nourishment, which brings the student to the dining hall, they will promptly and happily supply. They offer assistance in a form, which may be turned to high account with very little expense or trouble. — Broom corn may make a good crop for such an institution. It may be wrought on the spot into a form fit for the market to advantage ; especially, if skill be acquired and a good reputation earned.

In making arrangements for mechanical operations, a number of things may be indicated, which should be kept constantly in mind.

1. All the hands should, if possible, be employed in one kind of business. Arrangements, tools, and superintendence may thus be provided for, at a small expense. A reputation for skill and fidelity and enterprise may thus be more easily obtained and widely extended.

2. A kind of business should be selected, which will require for each workman but little shop room.

3. The fabric which may be wrought, should be of simple structure. Thus, whatever art may be requisite to carry on the operation may be easily and speedily acquired. The mind too will be refreshed rather than fatigued, by the *thought* necessary to keep the hands employed.

4. Work too should be chosen, which will give full and vigorous play to the muscles.

5. The raw material should be cheap and abundant.

6. A ready, constant, and permanent market should be at hand.

In some places flour barrels might well be made ; in

others, turning, combined with making hat-blocks, or boot-trees, or shoe-lasts, would be better. This matter in any place where manual and mental labor are to be combined, will demand close attention, much reflection, and careful experiment.

Whatever in the field or at the bench may be attempted, should in all respects be done in the best manner. Perfection should be aimed at. Fidelity, energy, skill, and grace should mark every operation. Thus only, can useful action, a good reputation, and a strong hold on public confidence be secured. Thus only, can the judgment and the taste be improved. Thus only, can a keen relish for agricultural or mechanical pursuits be acquired and cherished. Thus only, can we find that high gratification in our labors, which is essential to their best effect. What, without such high aims, would any athletic sport become? Dull enough, most certainly. Thus engaged in, who could expect to find in it a healthful, invigorating, refreshing exercise? None, surely. And in bringing our ingenuity and strength to bear on some agricultural or mechanical design, we may find gratifications, which the lazy or unenterprising never dream of. In the swing and gait of the finished mower, I have seen more dignity and grace than I could expect to find in the military or dancing academy. And when he paused and turned his eye back upon the wide and well-cut swath, what conscious exultation his countenance betrayed.

A course of study consuming three or four years, is far better adapted to the design of such institutions, as now claim our attention, than the short terms usually spent at the grammar school. The student must have time enough to find his proper place in the somewhat complicated system, to which he belongs. Some skill is requisite to enable him happily to act his allotted part. This must be the result of effort and experience. He ought to have oppor-

tunity to form *such* HABITS, as are adapted to his sphere of exertion.

It is very easy to see, that arrangements for manual labor must add not a little to the expenses, requisite to sustain any literary institution. And yet, plain as this matter is, it seems by many, who are free to speak on the subject, to be strangely misunderstood. Should we otherwise be reminded, as if notorious facts were referred to, that *experiment* has shown the practicability and excellence of manual labor schools to be at best very doubtful? If you venture to inquire on what ground and in what circumstances the experiment was made, you may be referred to some establishment, where the public in mock enterprise have grudgingly laid out a few hundred dollars in cash, together with a donation of an old, crazy wagon, two worn-out ploughs, half a dozen felt hats, and a stock of hemlock boards, at a mill somewhere in the country. And then for a library; ah, me! a regular file of the New London Gazette, four copies of the Gloucester Greek Grammar, and the Contrast between Hopkinsianism and Calvinism! Experiment! A handful of ovenwood to propel a steamboat! Let me assure you, gentlemen, this is not so gross a caricature as you may think. Does any one demand, what can manual labor schools need money for? Are they not *self-supporting*? Just as truly self-supporting as the motion of a pendulum is self-originated. For one, I own it puzzles me to guess what some philosophers can mean, when they gravely propose such inquiries. Why, dear doctor, can you buy land, and build workshops, and procure tools without money? The financier of the Oneida Institute — a gentleman, extensively and intimately acquainted with business doing, — assured me, that in that institution, to furnish ground and facilities for one hundred students to engage in manual labor must require *at least ten thousand dollars*. This sum must of course be added to

the amount, for which the literary and scientific advantages, that may be offered, are naturally procured. — Shew us a board of trustees ; intelligent, benevolent, enterprising men, who with good heart and hope, shall enlist in the design of building up a manual labor institution, where an education, truly liberal, may be secured. Put one hundred thousand dollars into their hands. Let them employ instructors and agents who are intimately acquainted with the system on which they are to act, and truly devoted to it. Now, ground is furnished for a fair experiment. Substantial results may now confidently be expected. Has anything like this been attempted ? Where ?

It is a great advantage, offered by manual labor schools, that *they enable the student to defray in part the expenses of his education*. The money which he needs, he must earn or take as a donation. It makes in the long run little difference with the public, whether he receives it from the hand of a father or from the managers of some charitable endowment. In either case, he lives on the beneficence of others. This thought never yet has reached the heart of the creature, who struts superciliously along by his fellow students, who are sustained by public kindness. Could he be brought to feel what a helpless thing he is, we should see no more of his turkey plumes. So far as personal dignity and worth are concerned, what odds can it make, whether he is dandled on the lap of his mother or of some other equally good woman ? And here, I must be permitted to say, that I have often wondered at the singular disinterestedness of *their* benevolence, whose every nerve is moved with fear, that the charity student will somehow be hurt by the aid he obtains from foreign sources in acquiring an education, while they lavish six times the amount he humbly asks for, on their own sons without the least dread or apprehension. As they are above all suspicion of hypocrisy, it must be, I suppose, because they love him

better. I hope, they will not be offended, if I modestly suggest, *that charity begins at home!* Whatever the student contributes towards his own support goes to diminish public burdens, which cannot but be felt somewhere. If one hundred young men, in a course of liberal study, earn in a single year, apart from their vacations, three thousand dollars, without arithmetic we may see, that three thousand dollars less will be demanded of their natural or adopted guardians. Why then should not this be reckoned a public benefit? Is not that amount thus contributed to the cause of liberal education?

I shall not be understood to say, that at manual labor schools, as they are now maintained in this country, the student ought to be expected to defray, by his personal exertions, the expenses of his education. The public most certainly have no right to look for such results, till these schools are far more liberally endowed. Till then, demands, however reluctantly, must be urged upon it to assist in sustaining the establishment, to which he may belong. And why complaints should be made, that, like students in other institutions, he receives assistance from an education society, is not easy to perceive. He earns something; he needs more. Why should his efforts to help himself, hinder others from assisting him? Will the Christian public offer a premium for idleness?

That muscular exercise must be taken by the student, who would enjoy good health, few will deny or question. This almost every body fully believes and strongly asserts. How some men contrive to keep their faith alive without works, I must leave for them to explain.

It seems to have been doubted by some, who have of late in an imposing form and through a highly respectable medium impressed their views upon the public mind, whether the combination of manual with mental labor in a system of education, can be made conducive to the maintenance

and preservation of health. The doctrine from which such doubts proceed may be thus presented. The healthful tendency of any exercise depends on its voluntariness. *Required*, it becomes a "task," and therefore irksome. It can no longer exhilarate, refresh, and invigorate. It must disgust, fatigue, and depress. It cannot but be worse than useless. In this doctrine, however plausible and current it may be, there lurks an error, which cannot but be fatal to its permanent authority and influence. It will not be pretended, I suppose, that the voluntariness of any effort depends upon the *mode*, in which the muscles may be exercised. A movement, I take it, may be truly voluntary without the use of the quoit, the ball-club, the fishing-pole, or any such means of bodily exertion. We shall not be required, I presume, to believe, that any exercise loses its voluntariness by being preceded or followed by any other exercise. The solution of a problem in mathematics might immediately precede, and a rhetorical effort directly follow the running, leaping, or wrestling, in which I might engage, or these things or any other such things might follow each other in any other order of succession or connexion, and yet everything be fully voluntary. I suppose, moreover, that no exercise necessarily loses its voluntariness by becoming *habitual*. Now manual labor, in a literary institution, consists in the habitual exercise of the muscles in different modes, in a fixed and known connexion with various other exercises, bodily and mental. Is there anything in this, adverse to the freedom of the will? But the trouble is, I am told, that all *this is required* of the student. There is nothing in the exercise itself, it may be, from which the mind recoils. In itself, it may be attractive and delightful. But the moment you give it the quality, and mark it with the character of DUTY, you make it repulsive and injurious! *Voluntariness is inconsistent with obligation*, from whatever source it may proceed and however useful may be its

tendencies ! Will it be affirmed then, that no action can be voluntary and delightful, which is not *spontaneous*, — which is not produced by impulses from within, without any reference to influences from without ? I hope we shall not be expected to receive such a dogma. If so, we must deny, that love to God or love to men can be a voluntary exercise ; for alas ! we are bound by obligations strong as the arm, and sacred as the authority of Jehovah, warmly to cherish and habitually to maintain this pure and sublime affection. According to this doctrine, the law of God must be a dread incubus on the human soul, to prevent by downright suffocation any voluntary exercise, worthy of the relations we sustain and the prospects before us ! But what if my views and feelings are accordant with the designs and requisitions of my Creator and Redeemer ? Must I not welcome to my inmost heart the obligations, He may place me under ? Shall I not run in the way of His commands with alacrity and delight ? Will required action, *because required*, become a task, hateful, wearisome, and exhausting ? Nay ; I shall find in obedience a well-spring of life — eternal life. Action most certainly may be the direct result of obedience to law ; and yet be in the best sense of the word *voluntary* ; be highly refreshing, deeply delightful, greatly invigorating. Otherwise, what a weariness would our sainted brethren find in the employments of the upper world ; for there we are assured, on divine authority, the servants of the Saviour *serve him*.

And here, I would ask, what does Christian education propose to do for him who seeks its advantages and comes under its influences ? It proposes to train him up to be in some useful station, a benefactor to mankind. Whatever may be its methods, it aims, if true to its profession, to bring all his powers and resources into direct and permanent subserviency to this commanding object. This object, then, in its substantial worth and subduing loveliness, must

be set clearly and fully before him. His heart must be fastened on it, his thoughts must be engrossed with it. He must be taught to pursue it with irrepressible desires and invincible endeavors. As a leading element, then, in the discipline to which he may be subjected, arrangements should be made and influences exerted, *to make every righteous obligation grateful to his taste and feelings*. He should be brought to welcome to his heart the claims, which duty urges upon every department of his nature. In his present sphere of action, he should be taught to attempt what he is expected to do amidst the scenes of future life; *to make himself as useful as he can*. Now what methods shall we adopt to work into his forming character such lessons of instruction? Shall we encourage him to regard every effort, which is required in a course of education, as an odious task, to be reluctantly attempted and heavily performed? Shall we encourage him to give up one quarter or one third of his waking hours to spontaneous action, regardless of rules and reckless of results; — a mere insect in the sunbeam or a fish on the water's surface? Ay, and to regard these, as the only hours in which *he truly lives!* lives free from the vexation and annoyance of tasks! And when he leaves us, and enters upon the scenes of active life, what station will he be fit for?

It is not true, that manual labor, performed from a "sense of duty," naturally fails to refresh and invigorate. The axe is often wielded; the saw is often plied at the appointed hour of effort, with eagerness and joy. Every nerve quivers with grateful feeling. The whole frame is strung anew for vigorous and delightful toil. A fresh impulse is given to every movement, indicative of repaired strength and renewed health. In confirmation of such statements, I might confidently appeal to the experience of some of the ablest scholars in the nation. We have reduced to practice, they would say, the doctrine, which by

the symbol of washing their feet, the Saviour long ago impressed on his disciples. *Happy* have we been in giving play to our muscles in performing the most menial acts of usefulness.

Another thing in this connexion, it may not be amiss to remind you of. That spontaneous action, of which so much is said in certain quarters, is apt to lead to strange results. Breaking windows, cutting bell-ropes, burning out-houses, and stoning freshmen and townsmen ; — O how brave and learned ; how dignified and delightful ! The feats of the wild ass's colt cannot be more VOLUNTARY, than the exploits of many of our under-graduates, who doubtless have a very polite dread of those tasks, which manual labor involves. What a pity that these *very honorable* young men — the hope and the glory of their country — could not be persuaded to pay the damages, which their *spontaneous action* creates ! For one, I never think without indignation and disgust, of the money, which according to college laws, their vulgar villany wrung from my lean pockets. O could I see such privileged criminals fairly in the penitentiary ! I would bid them welcome to the anvil, the stone-hammer, and their bread and water. Here they might learn to turn their muscles to a good account.

The influence of manual labor in promoting good order in a public school is powerful and manifest. It would be ingratitude in me to pass by this point, unnoticed. I know not when, in the institution with which I am connected, we have had occasion to blot a student's bill with a charge for mischief done by himself or by his companions. Give the scholar his hands full of "*tasks*," and you may escape the effects of his "*voluntary*" exercise.

But here our progress is arrested by the maxim, *systematic manual labor is apt to cripple genius*. This idea, whatever may be thought of its sublimity, is, I am sure, obscure enough. For one, I own, I have been sadly

puzzled to find out what that thing can be, which often bears the name of genius. When an under-graduate in college, I well remember, we had young men among us, who were fond enough of spontaneous exertions. They seemed to look with lofty scorn on rules and regulations. They had the courage to follow their own inclinations, whatever duty might require. They made wretched scholars ; but then, it was said, they were men of genius. Would they come down to the drudgery of study, no tongue could tell what attainments they might make ! Even now I seem to see the tall form of one of these superior beings, as he stalks with careless air along the well-trod college path. I pause to gaze upon him. The old inquiries, often put but never solved, return to my embarrassed mind : Pray, what canst thou be ? They say, thou art a genius. What may be thy thoughts, designs, emotions ? That thou art lazy and a mischief-doer, I know well enough. What may lie concealed within thy secret purpose ? — ah, there 's the mystery ! Now, I dare not affirm, that manual labor authoritatively imposed, and duly performed, might not cripple *such* a genius.

On what ground it can be asserted, that the rules and methods of education are ill-adapted to the happy development of the most powerful genius, I have yet to learn. No sober man, I imagine, will pretend, that genius consists in mind, disciplined, rich, mature, without the influence of cultivation. The material on which in any case, education employs itself, is to be found in the susceptibilities, powers, resources of the human constitution. The man who is entrusted with a larger amount of these endowments than falls to the lot of his fellows generally, may, I suppose, be regarded as gifted with genius. Now, is not this the very subject, on which education may exert itself with the greatest advantage and the happiest effect ? No part of systematic discipline, whether it may more directly affect the muscles or the mind, should here be overlooked.

Whatever goes to develope, to strengthen, to enrich, may with good heart and high hope, be employed. Superior size and strength and spirit are no good reason, surely, why a horse should not be broken to the harness or driven on the public road.

It is the strong tendency of uniting manual with mental labor, to break the cord which separates the members of the same family into jealous or hostile casts. It is, I fear, a pretty common feeling, that those who are devoted to books, are indolent and haughty. Their gloves and ruffles are regarded with a jealous eye. Their fine coats and white hands, their lofty air and measured gait are no credit to them with the brown, hardy, rugged sons of toil. They think that the man of letters "feels above them." Hence, he often finds it hard to win his way to their sympathies, affection, and confidence. His arguments, appeals, entreaties, they receive with doubt and hesitation. They are afraid to trust him. When he seeks exercise, they see him mount his horse, or pitch his quoit, or point his fowling piece. He keeps aloof from the scenes of homely toil, where they are the busy actors. He finds this requisite, they think, in order to maintain the standing of a scholar and a gentleman. It is a pity that any occasion should be given for the prevalence of such a sentiment. How can the occasion be removed? By giving to "working-men" substantial proof, that as *working-men* we regard them with fraternal feelings. And this may best be done by seeking renewed strength and reanimated spirits in the labors to which they are devoted. When they meet the student in the field or the workshop, the tools he wields become a medium of familiar intercourse and heartfelt sympathy. If he has skill and energy, he immediately rises in their esteem and confidence. They regard him as a brother, and feel honored by his learning and his station. He has a hold upon them in all respects, which the stately scholar, who stands aloof from their labors, can never command.

It is a strong recommendation of the system of education, which unites manual with mental labor, that it affords peculiar facilities to those who come under its influence, to increase their *moral worth*. This, of course, depends on our skill, fidelity, and activity in useful action. The system just described greatly enlarges the field, and multiplies the occasions, of useful effort. Just in proportion as these occasions are improved, and this field is occupied, our moral worth must be increased — shall we be better and happier subjects of the universal King. And I cannot help observing, that here a school is opened, in which the spirit and habits of *true politeness* may most readily and certainly be acquired. In what, I pray you, can this consist? Not surely in artificial smiles and phrases and gestures, however elegant and exquisite. Must it not consist in benevolent feeling expressed in acts of kindness? And this especially in the private walks and minor concerns of life? And is not he truly polite, who, with undissembled good nature, and with whatever skill and grace he can, contributes in every department of human interest to which he has access, to the happiness of his fellow creatures? What would you say, in this respect, of the attitude of the Saviour, when he washed his disciples' feet? Let the student learn to breathe his spirit, and imitate his example, — eagerly and joyfully to welcome every opportunity of doing good, publicly or privately, with his hands as well as with his tongue, in whatever walk of life, and by whatever office, courtly or menial, and he will not need a Chesterfield at his elbow, to teach him politeness. What parent, worthy of the name, would not regard it as a high privilege to be permitted to place his child under a discipline where even in his relaxation, he may give full and vigorous play to the best feelings of his nature — nay, to the holiest sentiments of Christian piety; — where, as well in his minor movements as in his main course, he may be increasing those imperishable treasures, which are counted wealth in heaven?

Give my child this discipline, and I will join with him in blessing you, as his distinguished benefactor.

The hints I have thrown out thus freely, might be easily and greatly expanded. But I supposed, that hardly need be done in this discourse, before such an audience. My own convictions, that the system, which for a few moments has occupied your thoughts, is fully practicable and highly excellent, are almost every day becoming more deep and fixed and effective. "My heart's desire and prayer to God is" that its virtue may be tested by fair experiment. I am certain, that the efforts which have been made do not deserve that name. And I marvel much, that men of large views and liberal feelings should, on account of the faint endeavors which have been made, so eagerly grasp at the conclusion, that the whole design is visionary. I have sometimes been almost driven to the thought, that they were somehow *interested* in decrying an object, they were so uncandid in judging of. An old college, in successful operation, now and then, how frequently I need not say, contrives to make the public feel, that it needs additional endowments to the amount of forty, fifty, or a hundred thousand dollars. But a manual labor institution, requiring much greater expenses, must move along in its allotted course with dignity and grace, ay, and glory too, with such endowments as might be expected from a jealous, peevish, step-mother — or be pronounced a failure ! Charity must be stretched on the rack, to the utter dislocation of her frame, before she can be forced to pronounce this candid ! Now it seems to me, that every friend of virtue and of learning in the land, may justly be expected to lend whatever of influence and aid he can, to give the manual labor system a fair and full trial. The peculiar blessings with which it may be pregnant, can be brought within the reach of every scholar. Let broad and substantial ground be furnished, and let the experiment proceed ! May Heaven crown it with the best results !

LECTURE VIII.

ON

THE HISTORY AND USES

OF

CHEMISTRY.

By C. T. JACKSON, M. D.

HISTORY AND USES OF CHEMISTRY.

CHEMISTRY is the science which explains all those combinations and changes of matter which take place among particles too minute to be observed by our sight. When a considerable number of atoms aggregate, they become sensible to our vision, and their movements are attended by phenomena more or less remarkable, dependent on the nature of the changes effected, and the intensity of their combining force. The object of this lecture is to explain some of the *numerous uses* of chemistry.

It may be considered under several distinct heads. I shall first speak of it as an art contributing to our physical wants ; secondly, as a branch of Philosophy, explaining the laws of natural phenomena and leading us to understand more of the beauty and perfection of the handiworks of God. The advantages to be derived from the study are immense and infinitely various ; I shall however only venture to suggest a few of the more obvious reasons why it should be generally cultivated.

First : the knowledge in itself is of great value to us in our ordinary avocations. Chemical knowledge is useful to every man, whatever may be his calling, as there is not a day that he may not have occasion for a practical application of this science, if not to supply his bodily wants, at least, as an *intelligent* being, to explain to him some wonderful process

that takes place before his eyes. The application of this science to the arts is everywhere shown by thousands of manufactures which furnish supplies for our necessities and comforts. The arts of glass making, bleaching, dyeing, soap making, calico printing, and porcelain making in all its branches from the rude Babylonian brick to the finished Dresden, Sèvres and China ware, are the direct results of chemical science. Working of metals of all sorts, in the surest and most economical manner, from their first extraction out of the earth until they receive their ultimate finish in the most delicate forms; the art of making an infinite variety of alloys, salts and colors, &c., all are dependent upon our knowledge of chemistry. The invention and manufacture of *gunpowder* which has, as it were, stayed the inroads of barbarians and forever established the superiority of science over rude physical force,—the tremendous power of steam, which is now made to carry us by land or water, to work our factories, and is ready to take the place of *gunpowder* in defending our liberties from aggression — these are some of the results of chemical science. The arts all owe much to this science and many of them are its immediate offspring.

Medicine is also under infinite obligations to chemistry, not only for the knowledge it gives us of the composition of every fluid and solid, of animal, vegetable and mineral bodies, but more immediately in the exhaustless supply of new, powerful, and efficient remedies it furnishes in their purest and most concentrated state. Almost every valuable medicinal plant has been forced to give up its secret principles on which its efficacy depended. *Cinchona* bark is now rarely given in its crude bulky state, but furnishes forth its proximate principles, which we can use to greater advantage, by knowing exactly their amount and their peculiar properties. *Opium*, instead of being now considered a simple substance, is found to contain twelve different principles, having various medicinal properties adapted to some exigency of the system. It would

require a course of lectures for years, to give a complete history of the numerous applications of chemistry to the arts and to medicine. I therefore forbear making any attempt to enter into details, and I refer you to the admirable work of Dumas on Chemistry applied to the arts, and other chemical authors.

Let us take a cursory view of the origin and of the history of this noble science, and see how it originated in ancient times and gradually struggled through the opposing powers of ignorance, bigotry, and cupidity to its present dignity and importance. The mythological history of Alchemy is very entertaining; but we have time only to quote the opinion of Zosimus the Panopolite, who declares that the art of making gold and silver is not a human invention, but was communicated to mankind by angels or demons. These angels, he says, fell in love with women, and were induced by their charms to abandon heaven altogether, and to take up their abode upon earth. Among other pieces of information which these spiritual beings communicated to their paramours, was the sublime art of chemistry, or the fabrication of gold and silver.

Europe was first indebted to the Arabians for the introduction of a knowledge of chemistry. It was confined by them principally to the extraction of metals from the earth and to the preparation of medicines; they called it Alchemy. The Saracen conquerors brought with them their physicians, who cultivated this science and introduced a knowledge of it into Spain. It will appear however, that the Egyptians were not wholly ignorant of chemical arts, although most of their writings were lost to the world by the burning of the Alexandrian Library; yet it is evident, from many relics found with the embalmed bodies of their princes, that they knew how to manufacture various colored glasses and frits, some of which are seen upon mummies brought from the catacombs of Thebes and Memphis, beads colored of a deep blue by oxide of cobalt, and of a fine

green by oxide of copper. This proves that they knew how to make glass, and were acquainted with the properties of the metallic oxides. The rich and permanent colors of their pigments used in painting sarcophagi, and inscribing hieroglyphic mementos, shew that they were acquainted with the art of preparing many mineral colors, which fully equal those made in modern times. They were also doubtless acquainted with the methods of working metallic ores, such as gold, silver, copper, tin, lead and perhaps iron, and the manufacture of steel; for without the latter substance they could never have cut figures in hard stone and sculptured statues in porphyry. The magic wrought by the Egyptians in their mysteries is supposed to have been in a great measure dependent upon their knowledge of the operation of chemical preparations; indeed, we cannot conceive of their being able to effect their wonderful deceptions without this knowledge. Yet strange as it may appear, no mention is made of Egyptian chemistry by Aristotle or other Greek writers who visited that country with Alexander the Great.

The Greeks do not appear to have known much of this science, although they made great progress in other branches of natural philosophy and natural history. Chemistry, introduced into Spain, by degrees spread itself over the continents of Europe and Asia. It soon became the object of great curiosity. The celebrated Academy of Bagdad, founded by the liberality of the powerful Arabian Caliph Almanzor, about the middle of the eighth century, extended its fame over all Europe, and drew thousands of professors and students from every quarter of the world. Public hospitals and laboratories were established to facilitate a knowledge of diseases, and to make students acquainted with the method of preparing medicines. In the thirteenth century, the Caliph Mostanser re-established the Academy, which had fallen into decay, and gave liberal salaries to the professors. Almamon and his successors contin-

ued their liberal patronage to the Academy, and encouraged every department of human learning. The most distinguished chemical writers among the Arabians were Geber and Avicenna, whose works have been preserved and translated into Latin : they possessed much knowledge of the action of bodies upon each other, and discovered many substances valuable to the arts. The adepts did not confine themselves to the study of chemistry as applied to medicine and the metallurgic arts. In the middle ages they endeavored to *spiritualize* and *mystify* their science, and their art soon sunk into the mere exorcism of demons who were supposed to preside over the various forms of matter. In their wild enthusiasm, they even dreamed of a talismanic substance, whose magic touch was to convert everything into gold, and an elixir of life capable of renewing youth, and of conferring everlasting life upon those who were possessed of the secret. Cupidity next ruled the field, and there were persons base enough to impose on their fellow-men and pretend that they were absolutely in possession of the *philosopher's stone* and the elixir of life. Impositions to a most incredible extent were practised upon the credulous and money was extorted by flattering promises of this important secret.

Alchemy became soon degraded by its abuse, and its name a reproach to those professing it. There were however, honest men deeply engaged in this science, whose patient labors under the most cruel and bigoted persecutions cannot be too highly commended. Some of these, while laboring in search of the *philosopher's stone*, discovered substances far more valuable to humanity than all that could have been effected had they found the golden talisman or even the elixir of life. Sulphuric acid (or oil of vitriol), Muriatic acid, Nitric acid (or aqua-fortis), Gunpowder, Prussian blue, porcelain, and many of the salts and metals, were discovered by the Alchemists, while engaged in search of an imaginary substance, which, if discovered, would have been far from pro-

ducing the happy results anticipated by these deluded men. Their researches served to keep science alive and formed the basis upon which the splendid fabric of modern chemistry has been elevated.

Chemistry was next studied in Germany, France and England. Paracelsus in 1526, by his wild enthusiasm, attracted great attention to chemical medicines, and caused the study to be universally pursued in all the medical schools and universities of Europe. He aided the cause of chemistry by making it an indispensable study to all medical practitioners, although he was himself an arrogant boaster and prince of quacks. Towards the close of the seventeenth century chemistry became generally studied, and the labors of Glauber, Geoffroy and Leméry greatly augmented the number of new compounds; and they gave to the world the best methods, then known, of preparing various acids and chemical salts. It was not until after the writings of Lord Bacon appeared, that any attempt was made to generalize the facts then known in chemistry. This great philosopher directed the human mind to seek into the *causes* of things, and the phenomena of chemistry were then soon reduced to order, and a *general theory* attempted. John Beecher, a German, was the first to begin this difficult labor. But we must look to comparatively modern times for the most brilliant discoveries, to which the great chemists of Europe were led by experiment and philosophical inductions. Black, Cavendish and Priestley first laid the foundations of pneumatic chemistry. The first, discovered carbonic acid, (or the fixed air in limestone,) and made invaluable researches respecting latent heat. Cavendish made valuable researches, and published a memoir upon carbonic acid and hydrogen gases. Priestley discovered oxygen gas and ascertained the composition of atmospheric air. Lavoisier and his associates in France discovered that water was a compound of the two elements oxygen and hydrogen, which he not only separated by analysis, but also recombined so as to again produce water,

thus, rendering by synthesis, the most satisfactory proof of the true composition of this liquid. He also carried out the researches of Priestley on the composition of atmospheric air, and by the most delicate process established its exact proportions of oxygen, nitrogen and carbonic acid. He discovered the true nature and composition of metallic oxides and of several acids, investigated all the curious phenomena of fermentation and shewed the nature of all the changes which took place. The greatest benefit this philosopher conferred upon science, was a reform of chemical nomenclature, which rendered it easy for chemists to understand each other, and to express clearly their views. Lavoisier lost his head upon the scaffold under the tyranny of Robespierre, ere his labors were complete, and thus the scientific world was deprived of one its *most brilliant luminaries*. The theory taught by this chemist was, that oxygen was the cause of acidity in all acids; hence he gave it the name it now universally bears which signifies *to produce an acid*. Modern researches have shewn that this generalization is not always true, and many acids are known, which do not contain an atom of oxygen, but that hydrogen acts the part of an acidifier when combined with chlorine, iodine, bromine, fluorine, cyanogen, &c., which acids are designated by the name hydracids. In Sweden, Bergman and Scheele extended the bounds of science beyond its former limits, to an unparalleled extent. They brought the art of working metallic ores to a high state of perfection; made analyses of numerous mineral and vegetable substances, and improved every manufacture dependent on chemical operations. Berthollet in France produced his celebrated work on chemical affinity, his *Statique Chimique*, and published his researches on the art of dyeing, which reduced to scientific processes, the rude operations of the dye-house. During the French revolution, the genius and patriotic exertions of Berthollet and his associate Monge

saved the nation from destruction. France was at that time hemmed in by an immense army of Austrians, Prussians and French emigrants, who attacked her by land, while the British fleets surrounded her sea coast, and thus shut her out from all communication with other nations. Thus France was thrown at once on her own resources. She had been in the habit of importing her supplies of saltpetre, iron and many other necessary implements of war: these supplies were suddenly withdrawn; and it was expected that France, thus deprived of all her resources, would be obliged to submit to any terms imposed upon her by her enemies. At this time she summoned her men of science to her assistance, and the call was speedily answered. Berthollet and Monge informed the government that the soil of France contained within its bosom all that was necessary for her defence. They traversed France in all directions, taught the people how to extract nitre from the earth under and around old buildings, and directed them to prepare pure saltpetre. Iron mines were discovered and explored by the skill of these eminent chemists where they were before unknown. Gunpowder works and forges arose as if by magic, in every part of France, and abundant supplies for her armies were provided. Thus chemistry saved the French nation from destruction.

The discovery of a simple process for obtaining nitre from the earth, not only prevented France from being overrun by foreign troops, but also aided our own country in resisting successfully the oppression of the British,—for while we were prevented from obtaining foreign supplies by her naval power, the French process enabled us to extract as much of this salt as we required, from our own soil. Thus *Berthollet* like *Lafayette* deserves the gratitude of the *two worlds*.

Chaptal taught the method of obtaining an abundant supply of sugar from the common beet, a manufacture of great

importance, when the ports of France were blockaded by British squadrons, and foreign supplies were cut off. Fourcroy, although he made few discoveries himself, gave popular courses of lectures, and interested every one in this science, so that a knowledge of it, soon became a *necessary*, and even *fashionable* accomplishment at Paris.

In modern times we have more remarkable discoveries, and chemistry has become so accurate in its processes that it may almost be reckoned an exact science. In England, the researches of Dalton gave the first clue to a theory of definite proportions, and atomic combinations, a theory, whose truth is now generally acknowledged by all chemists. Dalton first endeavored to represent these combinations, by symbols indicative of the nature and number of the combining elements. In this theory, hydrogen is taken for unity, and all other elements are calculated according to their respective weights, and combining proportions. His theory and numbers are recommended from their simplicity. This doctrine is prevalent in Great Britain, and generally studied in our own country. On the European continent however, the theory of the Swedish chemist Berzelius, is universally taught, in which *oxygen* is taken as the unit. There are many reasons for this preference, principally founded on the great number of combinations into which oxygen enters.

I should not pass over in silence the brilliant discoveries of Davy, one of the most illustrious chemists who ever existed. His discovery of the metallic bases of the alkalies and earths gave a new impulse to chemical science, and gained immortal honor for him, and the land that gave him birth. Davy was a poor boy, brought up in Cornwall, where he served an apprenticeship to a village apothecary. His attention was accidentally called to observe chemical phenomena, when the spark of scientific curiosity was kindled, which, by degrees, grew up to a noble enthusiasm and ardent love of knowledge. Davy in secret pursued his

chemical inquiries and experiments in the garret of the shop, and more than once, while learning in the severe school of experience, endangered the roof of the building in which he was experimenting. He was often reproached and corrected for his negligence in the shop, and for putting the building in jeopardy. His ardor was in no wise damped by reproof, and his fame spread through the village, when Dr Beddoes, a distinguished physician, who at that time was in search of a chemist to manage his pneumatic institution, passed through the town. He became acquainted with Davy, and instantly agreed with him to go Bristol, and take charge of the establishment. This was the first notice taken of Davy. With Dr Beddoes he continued to experiment, and discovered the celebrated nitrous oxide, or exhilarating gas. Subsequently, he came to London, and was appointed to lecture at the Royal Institution, where he always afterwards continued, and made his most remarkable discoveries. The production of a metallic globule from a piece of potash, by the galvanic battery of the Institution, was a signal for the reduction of all the other alkalies and earths, which were, by Davy and other chemists on the continent, rapidly compelled to give up their metallic matter. They were all found to consist of metallic bases combined with oxygen; and the truth of analysis was confirmed by synthesis, as the metal, when combined with oxygen, was found to produce a substance identical with that submitted to analysis. Gay Lussac, Thenard, Dumas and Chevreul, chemists now living in France, have done much for the progress of chemical science. Their labors are too varied and numerous to mention here.

In Germany, Klaproth gave the most elaborate essays on chemical analysis, remarkable for their great simplicity and clearness. He analysed a great number of minerals and discovered several metallic substances. We have now living another remarkable chemist in Prussia, Rose of Berlin, whose

work on chemical analysis should be in every laboratory.* Professor Berzelius, of Sweden, is another of those brilliant luminaries of the North, whose great discoveries and elaborate works on chemical science, have justly entitled him to rank as the father of modern chemistry. This distinguished chemist, who is still living, and ardently engaged in extending the bounds of science, is remarkable for his accuracy and sagacity in chemical analysis; and his great work on chemistry, is a monument of scientific research which will immortalize its author. To Berzelius we owe the invention of atomic, chemical and mineralogical formulas, by which the composition of a substance may be expressed in a short and comprehensive manner, by a few symbols derived from the initial letters of the names of the elements composing them. He has also done more than any other chemist, towards the construction of the atomic theory, by a long series of accurate analytic researches, into the exact proportional composition of inorganic substances. He has also given us the most exact methods of analyzing organic substances, and has himself made an immense number of careful analyses, of animal and vegetable matter.

I have now taken a rapid survey of the history of chemistry; enough I hope has been said to prove that the science has been advancing, and that its progress has been rapidly accelerating in modern times. It is for you, instructors of youth, to say, whether it shall proceed in this country, where we have, it is true, made a beginning, which promises well, but where we have to struggle by our own individual exertions, without the aid or patronage of government. It is for instructors to decide, whether or not the study of chemistry shall form a part of the education of their pupils. If the attempt be fairly made, and young persons are taught this science, the time will soon arrive, when it will be no

* The French translation, 2 vols. 8vo.

longer necessary to send to Europe for information of a chemical nature ; nor shall we suffer practical quacks and charletans to manage the laboratories of our manufactories, work our mines and manufacture our medicines. That such things have been, and are often done, is notorious. Empirics arrive among us, and sell their boasted nostrums and recipes for large sums of money, when, if we had sufficient knowledge of chemistry, we should not only be able to discover for ourselves, what we were desirous of knowing, if the pretended nostrums were really of any value or not, but should also often be able to detect pretensions to discoveries which are old, and which have stood on the book shelves of our libraries unread, for want of elementary knowledge of the terms of science. When therefore we see the great importance of a knowledge of this science in the community, it is the duty of instructors to teach its principles to their pupils, who, as they enter active life, will diffuse the knowledge over the country from one extreme to the other.

Chemistry teaches us the laws which regulate and produce the various combinations of matter in the inorganic world, and demonstrates to us the sources from whence the materials composing the various tribes of plants and animals were derived. It proves, that all organized beings are composed of elements, drawn directly or indirectly from the mineral kingdom, and that they exist in animals and vegetables, combined and arranged by peculiar laws, which are called laws of vital combination. Many of these laws are analogous to the ordinary laws of chemical combination ; others appear to be directly opposed to them. The modifying power of vitality is here the cause of these combinations, opposed to chemical affinity, as exerted under ordinary circumstances. The laws of vital arrangement belong to Physiology, and no one, who is ignorant of chemistry, can possibly engage in this study with success ;

for it is necessary, that the physiologist should understand the chemical nature of the substances he contemplates, and the laws which oppose vital action.

Chemistry then, is one of the most important branches of medical education, and like anatomy, must be considered as a part of the foundation of medical science.

We might here consider the value of chemistry to the practitioner of medicine, who cannot make an original prescription without danger of forming either an inert, or violent medicine, having properties altogether different from those he intended it should have possessed. Numerous proofs of such errors might be cited, if called for; the fact is, however, too obvious to require their mention.

It is also important to the physician, that he should be familiar with the laws of chemical combination; for on them depends the administration of antidotes to poison. The physician should also be able to recognise all the powerful mineral and vegetable medicines and poisons; for he may often be called upon to detect them, and in situations where he is unable to call in the aid of a professed chemist.

His successful treatment in cases of poisoning often depends upon an immediate knowledge of the nature of the poison, and by a few chemical experiments, requiring but a few moments, he is enabled, if he is acquainted with chemistry, to obtain for himself the desired knowledge, and to act with promptitude in the cure.

The physician is also frequently called into courts of justice, to decide on the nature of substances, suspected to be poisonous. By chemical means only, can he ascertain the nature of the suspected substance, and form an opinion worthy of credit.

The lawyer and advocate should also be acquainted with chemistry, for they are otherwise unable to understand the opinions of the medical witnesses, and to discriminate between truth and error, in chemical evidence. There are

numerous cases where this knowledge might be useful in courts of justice, not only in capital, but also in civil law suits.

The agriculturist may also obtain much useful knowledge from chemistry—for the nature of soils may be amended or improved, by treatment dependent entirely on chemical laws. The nature of soils and of the manures they require, and the action which these substances have on vegetation, are all subjects of chemical inquiry, and those acquainted with chemistry, have a great advantage over those who are ignorant of it. Examples might be mentioned, where the application of chemical principles, has been of the greatest utility in the treatment of soils, but we have not time to enter into such details.

The preacher of the gospel may also derive some of the most beautiful illustrations of the power, wisdom, and benevolence of the Deity, from reflections on the laws that regulate the combinations of matter. How varied and wonderful are the phenomena presented by the combining energy of the elements! How curious and beautiful are the laws which produce regular and symmetrical forms in crystals! How nicely adapted to their various ends are all things in the inorganic as well as in the organic world! How kindly distributed are the beds of coal, in regions where they are most required! How curiously the veins of metallic ores, are distributed in the rocks, and the strata of rock formations are tilted up, at such angles as to present sections of their whole mass, and disclose beds of valuable minerals contained in them. The science of chemistry is the light by which the mineralogist and geologist discover the nature, constitution and laws of these phenomena, and it shows him how these things have come to pass. Chemistry is then a study, exalting our powers of conceiving the laws, which the Creator of the universe has employed, in the construction, change and

renovation of the material world. Such studies cannot fail then, if pursued in a rational manner, to make man wiser, happier and better.

On the portico of the Academy at ancient Athens was this inscription, "*Let no one enter here who does not understand Geometry.*" We learn from this inscription, how great a value the ancient Greeks attached to the science of geometry; so that it was forbidden to any one not acquainted with its principles, to enter the temple, consecrated to learning and refined taste. They valued geometry not only for its immediate, practical utility, in the ordinary affairs of life; instructing them in the measurement of land; calculation of distances; in the construction of various engines, useful in war and in peace; the motions of the heavenly bodies, by which time was computed; of mechanic powers, by aid of which they might construct their dwellings. The application of this science to the *rules of taste* were not to be overlooked; it taught them symmetry in the proportions of their temples, whose unrivalled beauty have ever since served as models in architecture.

But we may doubtless suppose, that a class of philosophers, idealists like the Greeks, had other objects than these in view. The study of geometry, they perceived, had something in it ennobling to the human mind. It taught man to *reason*, to investigate the *laws of nature*, and to admire their beauty. This study then, tended to make man really better, to raise his soul to the contemplation of sublime objects, which could never have excited so much admiration, before his reason was enlightened. It tended to make him more devout in his contemplation of the works of nature — the works of God.

Chemistry considered in its application to education is of immense value. Like mathematics, it requires close attention, and teaches the mind to *analyze the phenomena on which*

it reasons, while the experimental processes serve to fix the facts learned, indelibly in the memory. This science becomes a sort of tangible logic and its results are corrected and checked by numerous experiments which shut out all chance of error. This study has so much value in every point of view that it were well to have it inscribed upon every college and high school in the country, and the principle fully enforced, "Let no one leave these walls until he has learned Chemistry."

LECTURE IX.

ON

THE INTRODUCTION OF NATURAL HISTORY

AS

A STUDY TO COMMON SCHOOLS.

By A. A. GOULD, M. D.

NATURAL HISTORY.

THE subject of this lecture is "Natural History," and the introduction of it, as a study, into common schools. My object will be to set forth some of its claims to general attention, to what extent it may be pursued with advantage by youth, and the assistance the teacher should render in studying it.

Everything formed by the hand of the all-wise Creator is worthy our consideration, and we may derive from the contemplation of each object, something to excite our wonder. But since man's necessities may all be supplied by a superficial knowledge of the history and qualities of a very few articles, it has happened that the study of Natural History, which embraces in its survey every created thing, has never formed a branch of elementary education, and is found to have been cultivated only in the midst of prosperity, and a state of advanced civilization. Natural History in this respect ranks with the Fine Arts. So much have the talents of all men in this country been hitherto demanded to look after the serious concerns of a rapidly increasing population, that Natural History as well as the fine arts, is as yet in its infancy with us. The community is not yet aware of its utility. The naturalist is perpetually asked the question, what is the use of all your plants and stones and bugs? and he is oftener looked upon as a crazy man, than as one possessed of his right mind.

That the pursuit of Natural History has done much towards ameliorating the condition, and administering to the comforts of mankind, cannot be denied. Aided by commerce, it has been the means of distributing the plants, trees, fruits and animals of any one country to every country over the whole globe. A knowledge of the properties of the products of nature, has enabled man to make them all administer to his advantage.

But as we are now regarding Natural History as a matter of common education, we will consider the personal advantages, rather than the general ones, which are to be derived from its study — and more particularly, such as regard the youth.

As a mental exercise, it is well adapted for the attention of youth. The mind is not obliged to dwell upon abstract propositions, but there is something tangible for it to operate upon. It is addressed to their senses, and tends to perfect them, by exercise in the repeated observation of form, color, order, size, &c., while at the same time, the mind is naturally brought into exercise in the act of comparing and judging, and in attempts to deduce the final causes of all the diversity witnessed.

There are many prejudices inculcated by ignorant nurses and domestics, which oftentimes greatly embitter many moments of life, and of which the youthful mind may be divested by the study of Natural History. What child has not been alarmed at the ticking of the death watch, which Natural History shows to be connected with no other agency than a minute beetle, innocently amusing himself by beating his head against a piece of wood. Which of us has not cautiously and fearfully skulked past the pool by the road side, when we have seen the harmless dragon-fly (*Libellula*) perched upon a stone or twig, lest the darning-needle, as we have been taught to consider it, should attack us, and sow up our eyes. What more likely

to produce a chill of horror than the dancing jack-o'-lantern when its cause is unknown? Numerous examples of a similar character, relating to other classes of the animal kingdom, might be adduced.

Immediately connected with the preceding, we might recommend Natural History as a general study, because we thereby learn the uses of every created thing — and which of them is advantageous or detrimental to the interests of man. The botanist learns that plants with cruciform, papilionaceous or compound flowers are rarely if ever baneful, while aquatic, umbelliferous plants and those with a milky juice are generally poisonous. The entomologist finds, that of all the tribes of insects, very few can inflict personal injury upon man. That none of them have jaws sufficiently powerful to penetrate our skins, except a few of the fly kind, who are provided with a set of knives and lancets for the express purpose of phlebotomizing us — that in general, all we have to dread from the beetle, the spider or the caterpillar, is the curious titillating sensation which they produce, by crawling over the exposed skin. That the only formidable weapon they wield is the sting, and that the possession of this is confined to a particular family of insects, viz. those which, like the hornet and wasp, possess four membranous wings. No insect, however much it may resemble a bee or wasp, need be feared, if it be found to possess but two wings.

Were we, by a study of Natural History, to trace out the relative dependence and the office of each of nature's works, we should be far less dissatisfied with her arrangements than we usually are — far less disposed to quarrel with her, for producing what we erroneously suppose are merely for our annoyance. We should then learn, that the toad, which we regard with so much abhorrence, is the best possible protector of our gardens from the depredations of insects — that the crow who pulls up one blade of corn

for the sake of its kernel, saves ten from destruction by worms — that the woodpecker which we endeavor to drive and exterminate from our orchards, because of his imagined injury to our fruit trees, has no more mischievous object, than to extract the insects which lurk beneath the bark. The spider is a loathsome creature — and yet it is the principal agent in the destruction of the pestilential flies ; the fly is exceedingly impertinent and vexatious — yet it is of unspeakable value to us for the speedy decomposition and removal of dead animal matter, whose noxious vapors would soon render life precarious, or to say the least, burdensome. Even the mosquito has its redeeming qualities. To this tribe of insects we are indebted for the purity of our cisterns and standing pools of water. It is the office of their larvæ to devour all the animalculæ and vegetable solutions in these waters, and thus preserve them from becoming putrid.

Thus, I say, were we in this way to make ourselves acquainted with the uses and habits of the living things about us, we should not so often interfere with our interests by destroying them ; we should find very minute agents engaged in magnificent undertakings, for our good ; we should be altogether less disposed to complain of any supposed infringements upon our rights and comforts, and should exercise far more charity towards many beings which have been the objects of our persecution — we should regard their innocence and kind purposes, and not judge merely by outward appearances.

Now this whole subject lies within the scope of the observation of every youth. There is perhaps no study from which the mind may be so rapidly stored with facts. The satisfaction derived from the surmounting of difficulties is ever great ; and so is that derived from the consciousness of having added to the stores of our mind by our own unaided efforts. These feelings, together with the inherent

beauty which the student finds in all nature's works, are continually operating as stimuli, to urge him to more extended researches.

I feel that I may safely recommend the study of Natural History not only as a source of pure, rational enjoyment, but as one of high moral power. Such is the nature of the subject, the harmony of nature's works, the wisdom displayed in their contrivance, the accumulating proofs of the benevolence of the Father of us all, that no study is more likely to purify the affections, and to direct them to the great Author of nature, the only Being worthy our adoration. And we find that the legitimate effects do follow. Naturalists, as a class, have been frequently held up to view, for the mildness and serenity of their tempers, their industrious and virtuous lives, and their pure morals. Indeed, so perfect is my own confidence of the preservative agency of the study of Natural History on the morals, that could I see a taste for any one branch of it awakened and cherished in a youth, I should rest at comparative ease in regard to his future good habits — I should feel that habits of industry were ensured — that the hours of leisure which others would spend in idleness or dissipation, would be usefully and innocently employed by him. I should feel assured that he would be preserved from vice and crime — and this, it will be acknowledged, is a matter of no small consideration, as regards the quiet of any parent, guardian or teacher.

The full improvement of each moment of time is earnestly sought, by every man who realizes its brevity, and the numerous and weighty matters that may and should be accomplished while it endures. There are moments in the hours of every studious man, when he finds himself unable to continue, with pleasure or advantage, the task before him; and he seeks something to fill up the interval profitably. Here, recourse is usually had to some work of

fiction, by which to amuse and relax the mind — for it is well known that the mind does not admit of absolute rest — it will always be filled by its own imaginings, if it be not directed to some specific object. But when fatigued by long continued application to one subject, it merely requires the subject to be changed, and it acts as if it had not been wearied. Now, nothing more pleasant can be presented, to occupy such moments, than the study of Natural History — and it is more useful than the light reading to which students usually have recourse, by as much as the works of God are more instructive than the works of man. I know a gentleman who, in the study of his profession made it a point, that in the course of reading one volume relating to his profession, he would read one on some subject connected with Natural History ; and he believes that these studies were simultaneously pursued, with as much progress in both, as if only one had been pursued at a time. With regard to the expediency of alternation in studies however, teachers may differ.

But much of the time of every man is taken up in change of place, either required by his daily avocations, or in travelling for health, pleasure or information. This time is usually consumed, so far as regards the mind, in vague and fruitless thought, because we are in no way interested in the objects by which we are surrounded. All intermediate space between our starting point and our destination appears a blank of lost time. Now this would not be so, were a taste for Natural History cultivated—the time would not be lost, either as regards new stores of knowledge, or rational enjoyment. In the midst of loneliness we should never be lonely—in the absence of human friends we should never lack intercourse or converse with beings ever worthy of our admiration, and ever capable of affording us instruction.

In addition to its mental and moral excellencies, the study

of Natural History is of no small value as a *source of health*. In this view of the subject, my remarks will be more particularly applicable to the study of Natural History in the high schools and academies, by those who are in preparation for the University, and for professional life. The restlessness and buoyancy of childhood and youth, and its immunity from cares and anxiety, exempt it from those ills which severe study and sedentary life induce, and to which I allude. It is as a preventive and antidote to those difficulties which are appropriately designated as the "disorders of literary men" that I would recommend the study of Natural History as sovereign. No matter what province of it is selected, the efficacy will be ample, and the result desired morally certain, provided that ardor and interest which naturally belongs to the subject, is excited.

The disorders above alluded to, are all, or nearly all, chargeable upon errors in diet and regimen: and those errors are but two, one in regard to each particular, viz. too much indulgence in appetite, and too little bodily exercise; or rather, the great amount of nourishment taken, is entirely disproportioned to the small amount of exercise practised. I leave it for others to demonstrate the reality and fatality of this error. It belongs to the physiologist proper, and not to the naturalist. Still, the value of the study of Natural History as a medical resource, affords so strong an argument in favor of its pursuance, and the health and well-being of the literary community is of such surpassing importance, that I hope for pardon if I now assume the physician so far, as to exhibit to you the reasons, which induce me to believe, that something more than my partiality for natural science lies at the bottom.

The secret is not obscure or remote. It is simply this. You wait not to be told, for observation or bitter experience may have already told all of you, that dyspepsy, in all its protean forms, is the ruthless scourge of scholars and

literary men. You know too, that it is induced by want of exercise, and that it demands exercise for its cure. But perhaps you may not know, though the physician does, with what difficulty the dyspeptic is excited to exertion, or, if he betake himself to it, as if his life depended upon a certain amount of exercise and a certain quantum of nourishment, daily, how difficult, if not impossible it is, to amuse his mind at the same time. The dyspeptic is most emphatically a selfish man — his whole thoughts are turned upon himself. He counts and measures every step he takes — he watches and weighs the effect of every morsel of food he eats — he notices every occurrence in his system which is sufficiently grave to excite sensation, and which is probably inseparable from even the man in perfect health, under similar circumstances, and wonders what they mean. In short, he is wholly absorbed in self. Now it becomes necessary, for the successful and speedy relief of his maladies, that his mind should become divested of such anxiety — for it is labor of mind disproportioned to bodily vigor that maintains and aggravates his disease ; and it is this kind of anxiety which adds the keenest pangs to his real sufferings. Exercise, however freely and faithfully pursued under such circumstances, loses more than half its benefit.

Such is the true state of the case. Now this is the simple remedy. Let such a man adopt the study of some branch of natural science, or the study of nature in general. Suppose him to choose Botany. The dyspeptic takes his book and learns some of the general and leading characters of plants — he daily collects from the garden such specimens as he finds there, and examines them — soon his garden is exhausted, his knowledge is increased, and his ardor heightened, and he strolls to the neighboring meadow, busily seeking for new objects, and delighted by each one he finds. This field is soon exhausted, and his enkindled zeal by degrees urges him through forests and over moun-

tains, till soon no pedestrian enterprise seems too irksome, or too arduous for him, if he may but gratify his thirst for acquirement, in his favorite pursuit. And thus he is led on, step by step, forgetful of himself and of fatigue, and having spent his hour or his day almost without a consciousness of effort of body, and his mind disburthened of weighty cares, he returns home invigorated by the full benefit of healthful air and exercise, besides having amused himself, and added new stores to his knowledge.

The same enthusiasm will result, and the same salutary effects ensue, whether he sally forth with the book and the case of the botanist, the hammer and bag of the mineralogist, the nets and boxes of the entomologist, the rod and basket of the ichthyologist, or the fowling-piece of the ornithologist.

Such a course will soon restore tone to the exhausted digestive organs, and cheerfulness and rationality to the downcast and hypochondriac mind of the confirmed dyspeptic. That such would be the result, the nature of the case would lead us to expect, and the experience of many might be brought in confirmation. If such is the benefit in regard to confirmed dyspeptics, under all the disadvantages of an exhausted system, how like a moral certainty must it appear, that a student may, if he chooses, *maintain* his health in vigor by a similar course, without materially interfering with his destined course of study. Is he not chargeable with all the mischief arising from the neglect of it?

I feel justified, therefore, to recommend, in strong terms, the study of Natural History as a source of health, without which, any amount of knowledge, however great, can be of little gratification to ourselves and of little use to others.

Having said thus much of the adaptedness of the study of Natural History to the elevation of our physical, mental

and moral natures, I proceed now to point out what I think to be the character and amount of this study, which it is practicable and desirable should be introduced into common education, and to suggest some methods of pursuing it.

Once, when I was in the country, a little boy, four or five years old, saw me deposit an insect which I had captured, in my collecting box. He disappeared, but returned in a few moments, bringing me a fine beetle, and invited me to enter his father's garden, where he told me he could show me plenty of bugs. I did so; and as we passed rapidly along from plant to plant, he predicted what insects we should find upon each species, and even went so far as to point out to me the transformations which several of them underwent, with great accuracy and assurance. I was equally delighted and astonished. His mother remarked that she had seen him stand by the hour, carefully observing the bushes, but could not imagine what occupied his attention. He could give them no names, but he could describe them by their external appearance, and he knew their history, their habits and their residence, and he had at the same time learned something about the plants on which they dwelt. I introduce this little history here, because it exemplifies precisely what I wish to communicate to you of my ideas as to the manner in which Natural History is to be commenced and prosecuted by ordinary and youthful minds — the manner in fact, in which I would have Natural History studied, in common schools and academies.

The study of Natural History being a matter of relaxation and gratification, rather than one that is essential to supply the necessities of life, no one will set himself about it, or be compelled to engage in it, as a task; whenever it is pursued, it will be done voluntarily and eagerly. Curiosity and interest then, are first to be excited. This it not to

be done by commencing with an attempt to render the immature mind master of a system of hard names. No department of Natural History except Botany, requires that anything like a system should be learned at the outset, and this has perhaps been rendered necessary, by the manner in which books on that subject are constructed, the sexual system of Linnæus being employed as an index to them. And nothing serves to illustrate the fruitlessness of such a plan more fully, than this very study of Botany, hitherto the most popular of all branches of Natural History in schools. In consequence of the evil attached to it, the time allotted for its acquisition is barely sufficient to gain a knowledge of its terms, and the whole science becomes little else than the counting of stamens and pistils; and if the student can tell whether a plant belongs to pentandria or didynamia, words to which he attaches no meaning, it is the height of his aspiration. This is even of more importance to him than the name of the plant. It is of no consequence whether it is good for the food of man or beast, whether it is sanatory or poisonous, whether it may be cultivated on dry or wet soil. The kind of knowledge which is usually gained is, in fact, neither valuable nor appropriate for youth, because it is neither practical nor comprehensible. The grand aim in the education of youth is, to store the mind with facts; and the object of instruction is to point out the way, and assist in acquiring them. Maturer age will arrange and systematize these facts, and render them of practical value. Especially is this the secret of improving time economically in Natural History. Encourage in children and youth habits of observation, and store the mind with facts, in the common schools, or during the period of life usually spent in common schools, and if the subject should not be pursued at length in after life, this knowledge of facts will be all that will remain of any use to them. But if taste and oppor-

tunity lead them to become, in the extended sense of the word, naturalists, they will make much greater progress in systems and technicalities in their own studies, with books in their own hands, a knowledge of language adequate to understanding them, and objects before their eyes for the purpose of illustrating them—he will do this, I say, equally well, if not much better, without instruction than with.

The elements of all knowledge lie in personal and practical observation, and every one to be a naturalist must collect and examine objects himself. It is impossible to study Natural History to any advantage merely from books, as we can grammar, and rhetoric, and mathematics. A man by his closet acquirements in Natural History may obtain for himself by way of distinction, the name of the Naturalist, and discourse most eloquently for hours on the habits, uses, beauties and residence of plants, shells, insects, &c. but who actually cannot recognise one out of ten of the various objects whose history he is so well acquainted with, when presented to his view. I do not believe in the utility of encumbering the minds of children with technicals, which neither they, nor their grandfathers can comprehend, and which they are constantly and ludicrously misapplying. They sound sufficiently pedantic when coming from the lips of manhood. And while I maintain that the study of Natural History is peculiarly appropriate and delightful to youth, I say let it be confined almost entirely to observation. Induce scholars to observe the form of the root, stem, flower and seed of the plant—its time of blossom and seeding—the soil on which it grows—its duration—the insects that resort to it, or are peculiar to it—their transformation, means and mode of life;—let them observe the structure and plumage of the birds—their song—their nests—the time of their appearance and

disappearance, and the food on which they subsist;—let them examine the shells and the fish which abound in every ocean, and lake, and brook, and let them study the various instincts of the higher orders of the animal kingdom;—let them look through the whole chain of nature and see the mutual dependence of each link on every other—what a wonderful and complicated provision there is for the unceasing destruction and revivification of all organized matter. It is a fact that nothing is permitted in nature to remain dormant; for no sooner does anything cease to be actively useful, whether vegetable or animal, than its decay is hastened by the attacks of living beings both animal and vegetable, and its spoils afford sustenance to various creatures, by whom it is immediately endowed with the principle of vitality, in being thus appropriated.

From man and the lords of the forest, the sea, and the air, down to the lowest animalculæ, there is a mutual dependence and connexion, which it is alike useful, and curious, and wonderful to contemplate. They in turn destroy each other, and nourish each other. This mutual dependence, and the curious provisions in structure, by which each creature is adapted to fill the place it occupies, affords an inexhaustible theme for a lifetime of observation. In this light, and in this alone, would I recommend the study of Natural History in common schools. I would have children study no books but nature's own book. I know that it is not necessary for every one to go over anew the whole process of discovery, which others have previously pointed out; the very purpose of books and improvements in education would then be nugatory, and we should be making no advance in science. But you will perceive my meaning to be, that the time of early education should be given to observation, and the acquisition of *facts* by observation, which shall be delightful and useful throughout life; and that it should not be spent in the fruitless exercise of laying up words without ideas.

There is one point of view, however, in which this position should be qualified. Whenever the name of an object is inquired for, (and it is one of the ruling propensities of youth, to know the names of everything) it is as easy to teach a correct name as an incorrect one — a name which will be recognised the world over, as one which will be understood in one neighborhood or one language only. It is as easy, for instance, to remember the words *Strombus* or *Buccinum* as *Conch* — the word *Scalaria*, as *Wentletrap* — *Helix*, as *Snail* — *Melolontha*, as *Dor-bug* — *Solidago*, as *Golden rod* — *Falco*, as *Hawk* — *Columba*, as *Pigeon*, &c. By availing themselves of every opportunity of this kind, much that is correct and useful might be communicated by parents and teachers. At any rate, there is no excuse, at the present day, for propagating error in children's books. It is unpardonable to represent, as I have seen done, a *Moth* under the name of *Butterfly*, a kind of *Grasshopper* under the name of *Hornet*, and a *Crab* with six legs instead of ten.

There are a few general principles, however, which must needs be taught at the outset, to indicate to the student the common points to be noticed in every research in Natural History; and without a knowledge of which, much time might be spent in useless observation. Such, for instance, as that all the vegetable creation, from the microscopic *lichen* or the *mushroom* of a day, to the gigantic *oak* of a thousand years, have, at one time or another, blossoms and fruit, either obvious or concealed — that each member of the animal creation is adapted, by its structure, for a peculiar mode of life, destined to occupy a peculiar place in the animal economy, and by an examination of which, the naturalist would be able to tell the mode of life of any object which might be presented to him, even though he may never have seen it alive. It is well known, that the great *Cuvier*, by seeing a tooth, or almost any single bone, was

able to declare with positiveness the habits and structure of the animal to which it belonged. It is important to be known, also, that all insects undergo wonderful transformations during their existence — that birds have periods of moulting, and pairing, and migration — that shells are inhabited by animals — and a multitude of things of a similar nature, which will immediately suggest themselves to the mind of any one who has qualified himself as an instructor in Natural History, by a course of practical observation.

Granting now, that the subject of Natural History is an interesting and useful one for the attention of youth, you will say the subject is interminable, we cannot attend to all the branches of Natural History, at least with any prospect of making much progress in them. Which department, then, is most suitable for the youthful capacity? This is a difficult question to decide, because all are fascinating and practicable, and yet all have their peculiar difficulties, as well as attractions. The study of Botany has always been the most popular, and is most likely to continue so, because of the innate partiality for flowers which seems to be implanted in every one — the facility with which it may be pursued practically — and because no violence is done to those tender sympathies which so much adorn the youthful mind, by any restraint or destruction of animal life. Still it is a study necessarily encumbered with hard names, and is not apt to induce an attention to the *habits* of plants. The study of Entomology is eminently exempted from this last charge, and the objects for study are vastly more diffused and accessible than those which are subjects of examination in Botany, and also more immediately connected with self; but they are regarded, most unjustly too, as objects of disgust, and legitimate subjects for persecution and extermination, and the sacrifice of life is involved in their collection and examination.

These two departments, Botany and Entomology, should

be studied in connexion ; because every plant has some one or more insects peculiar to it, besides affording occasional nourishment or refuge to many that are not so limited in their range. In fact, the different parts of a plant, — the root, stem, leaf, flower and fruit, have each their parasite. The entomologist learns where to expect each species of insect he desires. He is not obliged to subject himself as a ludicrous spectacle, in chasing a butterfly over the field, if he would obtain it ; but he knows the plant where he may find it in its unfledged state ; and he knows, also, the proper season for expecting it. Thus, in the pursuit of one study, we unavoidably come in contact with the objects of the other.

The study of the Crustacea and Mollusca, which occupy the same place at sea that insects do on land, is by no means devoid of interest. But it must be limited to those who reside in the vicinity of the sea.

Conchology, within a few years, has come to engage a disproportioned share of attention and has perhaps been more generally studied, than any other branch of Natural History. Its interest consists chiefly in the beauty and variety of shells. This is wanting in profit as a study for youth, because it is for the most part an indoor study, and because shells are the mere inanimate residences, of creatures about which a scholar will seek no knowledge. Conchology, as it is usually studied, is in fact a mere gratification of curiosity, an amusement, innocent and pleasant in itself, but fraught with little real information, and little practical benefit.

Ichthyology and Ornithology are both of them liable to the objection, that they may nurture, in youth, habits of cruelty, and a disregard for life, every approach to which we should beware of cherishing. Aside from this, I can conceive of no study more pleasing and healthful than that of Ornithology. It leads us to the contemplation of objects

innocent and charming in themselves: their habits and modes of life are sufficiently wonderful to excite our highest admiration; their form and colors are wonderfully beautiful and graceful; their song so melodious as to charm the most fastidious ear; their example might inculcate many a precept of affection and innocence; and, withal, the study implies the enjoyment of the purest air, the loveliest scenery, and the most healthful exercise.

Mineralogy is a subject of perhaps even more universal attention than Botany. Its practical utility, and the intrinsic value of its products, have perhaps tended to render it such. These considerations are weighty in advancing the claims of Mineralogy. By the ardor with which it is usually pursued, we reasonably conclude that it abounds in interest. In short, we find connected, almost all the benefits which might be expected from the pursuit of other departments of Natural History; and we find nothing to set down against it, unless it be, that it is not a study appropriate for both sexes, and that such an extended and thorough acquaintance with it as would render it practically useful, requires a knowledge of Chemistry which few possess.

On the whole, then, we think there is little to choose between Mineralogy, Botany, Entomology and Ornithology, as a study for youth. They are each sufficiently useful, and sufficiently attractive and fascinating; and objects for consideration in each of these branches are abundantly accessible.

How abundant they are, no one can realize who has not himself made them objects of search. Nearly five thousand animals and plants, besides minerals, are already catalogued by Professor Hitchcock, in his Report on the Mineralogy, Botany and Geology of Massachusetts. Hundreds and thousands of birds, plants and minerals are within the daily walks of almost every individual in the country, while the

hosts of insects are almost countless. They are in every path, in every pool, and on every blade of grass. The entomologist, while in search of insects, tramples down the rarest plants, and turns over the richest mineral specimens without noticing them; while the botanist or the mineralogist crushes thousands of insects beneath his feet, while in pursuit of the subjects of his favorite science.

It may be expected that I should say a few words on the modes of teaching Natural History to children. The object is to teach them the art of observing, and not the rules of books. Let the teacher first inculcate, that every object he sees upon the face of the globe, however repulsive at first sight, is worthy of examination, that it has something peculiar to itself, and that it has an office to perform in the economy of the universe. Let him then endeavor to illustrate this, by exhibiting and explaining some object whose history he knows — no matter what this is — the first may be a mineral, the next a plant, and the next an insect. While doing this, he will, of course, be obliged to point out the important parts of that object, and the uses to be made of them. I will endeavor to illustrate what I mean, by a single example. Let the teacher go to the common thistle in July, and he will usually find upon its leaves a brownish caterpillar, covered with spines: let him show how these spines, being longer than those on the thistle, of course protect the tender body of the caterpillar from being wounded: let him show how the caterpillar, in the course of his growth, casts off one skin after another, to allow of his enlarged size: see him arrived at his full growth, seeking a place beneath some leaf, where he may suspend himself — now he spins a small, thick web, and fastening his hinder feet into it, he swings off, and hangs head downward — soon the skin bursts behind his head, and he, in the most wonderful manner, extricates himself from his skin, and casting it down, remains suspended in his place, without

legs for motion, or mouth to take food, appearing like a mass of solid gold. About fourteen days from this, during which this nymph or chrysalis, as the pupil may be told it is called, remains motionless, without eating or drinking let them observe again; they will perceive the gold to become dim, and the morning afterward, the covering burst, and an unseemly creature is seen to issue forth, and cling to its cast off clothing — watch it for half an hour, see its wings expand, and behold the beautiful calico butterfly: tell him how it flits about for a very few days, deposits and secures its curious eggs, which are to produce, not butterflies, but caterpillars, and then dies. You have taught a lesson which he will delight to observe again and again, and point out to others, and which will serve as an example for the study of every other caterpillar the child may ever meet with. Next, you may take up some other object, no matter what, which shall be illustrated. It will be seen that the study is to be mostly pursued out of doors, and that all instruction is to be given by lectures, and not in the form of recitation. This may all be done without the aid of books or the encumbrance of hard names; and it requires that the teacher should be but little in advance of his pupils. After much attention to the subject, the pupil may not have become a proficient in any single branch of Natural History; but he will have acquired an unquenchable love for the whole subject, and will have cultivated, at an early age, the only true method of making any proficiency as a naturalist; and if, in after life, his circumstances shall prevent him from aspiring to this title, he will have directed his thoughts into a channel which will afford him a never-failing source of amusement, happiness and profit, whatever may be his lot in life, or wherever he may be situated.

LECTURE X.

ON

THE SCIENCE OF GOVERNMENT

AS A

BRANCH OF POPULAR EDUCATION.

By JOSEPH STORY.

THE SCIENCE OF GOVERNMENT.

GENTLEMEN — The objects of the American Institute of Instruction are, as I understand them, in a great measure, if not altogether of a practical nature. Under such circumstances the time passed here might well be deemed ill employed, if any attempt were now made merely to bring together topics for literary amusement and recreation, or an elaborate discourse, designed to gratify the taste of scholars, should be substituted for plain, direct and grave discussion. I shall, therefore, proceed at once to the task, which has been assigned to me on the present occasion, and endeavor to bring before you such views as have occurred to me touching "The Science of Government as a branch of popular Education."

The subject naturally divides itself into three principal heads of inquiry. In the first place, is the science of Government of sufficient general importance and utility to be taught as a branch of popular education? In the next place, if it be of such importance and utility, is it capable of being so taught? And in the third place, if capable of being so taught, what is the best or most appropriate method of instruction? My object is to lay before you some considerations on these topics, in the order in which they are stated; and I think that I do not overvalue them, when I assert, that there are few questions of a wider or deeper interest, and few of a more comprehensive and enlarged phi-

losophy, so far as philosophy bears upon the general concerns of human life.

First, then, as to the importance and utility of the science of government. Of course I do not intend here to speak of the necessity of government in the abstract, as the only social bond of human society. There are few men in our age, who are disposed to engage in the vindication of what some are pleased to call natural society, as contra-distinguished from political society ; or to pour forth elaborate praises in favor of savage life, as superior to, and more attractive than social life. There is little occasion now to address visionaries of this sort ; and if there were, this is not the time or the place to meet their vague and declamatory asseverations. It is to the *science* of government, that our attention is to be drawn. The question is not, whether any government ought to be established ; but what form of government is best adapted to promote the happiness, and secure the rights and interests of the people, upon whom it is to act. The science of government therefore involves the consideration of the true ends of government, and the means, by which those ends can be best achieved or promoted. And in this view it may be truly said to be the most intricate and abstruse of all human inquiries, since it draws within its scope all the various concerns and relations of man, and must perpetually reason from the imperfect experience of the past for the boundless contingencies of the future. The most, that we can hope, under such circumstances, to do, is, to make nearer and nearer approximations to truth, without our ever being certain of having arrived at it in a positive form.

This view of the matter is not very soothing to human pride, or human ambition. And yet the history of human experience for four thousand years has done little more than to teach us the melancholy truth, that we are as yet but in the infancy of the science : and that most of its great

problems remain as yet unsolved, or have been thus far solved only to mortify human vanity and disappoint the spirit of political prophecy. Aristotle and Cicero, the great masters of antiquity in political philosophy, exhausted their own ample resources rather in the suggestion of hints, than in the formation of systems. They pointed out what had been, or then were the forms and principles of existing governments, rather to check our ardor, than to encourage our hopes ; rather to instruct us in our duties and difficulties, than to inflame our zeal, and confirm our theories. They took as little courage from the speculations of Plato, pouring out his fine genius upon his own imaginary republic, as modern times have from examining the Utopia of Sir Thomas Moore, or the cold and impracticable reveries of one of the most accomplished men of the last age, David Hume.

The truth is, that the study of the principles of government is the most profound and exhausting of any, which can engage the human mind. It admits of very few fixed and inflexible rules ; it is open to perplexing doubts, and questions in most of its elements ; and it rarely admits of annunciations of universal application. The principles, best adapted to the wants and interests of one age or country, can scarcely be applied to another age or country without essential modifications, and perhaps even without strong infusions of opposite principles. The different habits, manners, institutions, climates, employments, characters, passions, and even prejudices and propensities, of different nations, present almost insurmountable obstacles to any uniform system, independently of the large grounds of diversity, from their relative intelligence, relative local position, and relative moral advancement. Any attempt to force upon all nations the same modifications and forms of government, would be founded in just as little wisdom and sound policy, as to force upon all persons the same food, and the

same pursuits; to compel the Greenlanders to cultivate vineyards, the Asiatics to fish in the Arctic seas, or the polished inhabitants of the south of Europe to clothe themselves in bear skins, and live upon Iceland moss and whale oil.

Government, therefore, in a just sense, is, if one may so say, the *science of adaptations*—variable in its elements, dependent upon circumstances, and incapable of a rigid mathematical demonstration. The question, then, what form of government is best? can never be satisfactorily answered, until we have ascertained for what people it is designed; and then it can be answered only by the closest survey of all the peculiarities of their condition, moral, intellectual and physical. And when we have mastered all these, (if they are capable of any absolute mastery) we have then but arrived at the threshold of our inquiries. For, as government is not a thing for an hour or a day, but is, or ought to be, arranged for permanence, as well as for convenience of action, the future must be foreseen and provided for, as well as the present. The changes in society, which are forever silently but irresistibly going on—the ever diversified employments of industry—the relative advancement and decline of commerce, manufactures, agriculture and the liberal arts—the gradual alterations of habits, manners and tastes—the dangers, in one age from restless enterprise and military ambition, in another age from popular excitements and an oppressive poverty, and in another age from the corrupting influence of wealth, and the degrading fascinations of luxury—all these are to be examined and guarded against, with a wisdom so comprehensive, that it must task the greatest minds, and the most mature experience.

Struck with considerations of this sort, and with the difficulties inherent in the subject, there are not a few men among those, who aim to guide the opinions of others, who

have adopted the erroneous and alarming doctrine so forcibly expressed by Pope, in a single couplet,

“For forms of government let fools contest;
Whate’er is best administered, is best.”

As if everything were to be left to the arbitrary will and caprice of rulers; and the whole interests of society were to be put at risk upon the personal character of those; who constitute the existing government. According to this theory, there is no difference between an absolute despotism, and a well organized republic; between the securities of a government of checks and balances, and a division of powers, and those of a sovereignty, irresistible and unresisted; between the summary justice of a Turkish Sultan, and the moderated councils of a representative assembly.

Nay, the doctrine has been pressed to a farther extent, not merely by those, who constitute, at all times, the regular advocates of public abuses, and the flatterers of power, but by men of higher characters, whose morals have graced, and whose philosophy has instructed the age, in which they lived. The combined genius of Goldsmith and Johnson arrived at the calm conclusion, that the mass of the people could have little reason to complain of any exercises of tyranny, since the latter rarely reached the obscurity and retirement of private life. They have taught us this great conservative lesson, so deadening to all reforms and all improvements, with all the persuasive eloquence of poetry,

“In every government though terrors reign,
Though tyrant kings and tyrant laws restrain,
How small of all, that human hearts endure,
That part, which laws or kings can cause or cure.”

If this were true, it would, indeed, be of very little consequence to busy ourselves about the forms or objects of government. The subject might amuse our leisure hours,

but could scarcely touch our practical interests. But the truth is far otherwise. The great mass of human calamities, in all ages, has been the result of bad government, or ill-adjusted government; of a capricious exercise of power, a fluctuating public policy, a degrading tyranny, or a desolating ambition. Bad laws and bad institutions have gradually sunk the peasantry and artisans of most countries to a harsh and abject poverty, and involved them in sufferings, as varied and overwhelming, as any inflicted by the desolating march of a conqueror, or the sudden devastations of a flood.

But an error of an opposite character, and quite as mischievous in its tendency, is, the common notion, that government is a matter of great simplicity; that its principles are so clear, that they are little liable to mistake; that the fabric can be erected by persons of ordinary skill; and that when once erected upon correct principles, it will stand without assistance,

“By its own weight made steadfast and immovable.”

This is the besetting delusion (I had almost said besetting sin) in all popular governments. It sometimes takes its rise in that enthusiasm, which ingenuous minds are apt to indulge in regard to human perfectibility. But it is more generally propagated by demagogues, as the easiest method of winning popular favor by appeals, which flatter popular prejudices, and thus enable them better to accomplish their own sinister designs. If there be any truth, which a large survey of human experience justifies us in asserting, it is, that in proportion, as a government is free, it must be complicated. Simplicity belongs to those only, where one will governs all; where one mind directs, and all others obey; where few arrangements are required, because no checks to power are allowed; where law is not a

science, but a mandate to be followed, and not to be discussed ; where it is not a rule for permanent action, but a capricious and arbitrary dictate of the hour.

But, passing from these general considerations, (upon which it is, at present, unnecessary to enlarge,) I propose to bring the subject immediately home to our own business and bosoms, by examining the importance and utility of of the science of government to Americans, with reference to their own political institutions. And I do not hesitate to affirm, not only, that a knowledge of the true principles of government is important and useful to Americans, but that it is absolutely indispensable to carry on the government of their choice, and to transmit it to their posterity.

In the first place, what are the great objects of all free governments? They are, the protection and preservation of the personal rights, the private property, and the public liberties of the whole people. Without accomplishing these ends, the government may, indeed, be called free, but it is a mere mockery, and a vain fantastic shadow. If the person of any individual is not secure from assaults and injuries ; if his reputation is not preserved from gross and malicious calumny ; if he may not speak his own opinions with a manly frankness ; if he may be imprisoned without just cause, and deprived of all freedom in his choice of occupations and pursuits ; it will be idle to talk of his liberty to breathe the air, or to bathe in the public stream, or to give utterance to articulate language. If the earnings of his industry may be appropriated, and his property may be taken away at the mere will of rulers, or the clamors of a mob, it can afford little consolation to him, that he has already derived happiness from the accumulation of wealth, or that he has the present pride of an ample inheritance ; that his farm is not yet confiscated ; his house has not yet ceased to be his castle, and his children are not yet reduced to beggary. If his public

liberties; as a man and a citizen, his right to vote, his right to hold office, his right to worship God according to the dictates of his own conscience, his equality with all others, who are his fellow citizens; if these are at the mercy of the neighboring demagogue, or the popular idol of the day; of what consequence is it to him, that he is permitted to taste of sweets, which may be wantonly dashed from his lips at the next moment, or to possess privileges, which are felt more in their loss, even than in their possession? Life, liberty, and property stand upon equal grounds in the just estimate of freemen; and one becomes almost worthless without the security of the others. How, then, are these rights to be established and preserved? The answer is, by constitutions of government, wisely framed and vigilantly enforced; by laws and institutions, deliberately examined, and steadily administered; by tribunals of justice above fear, and beyond reproach, whose duty it shall be to protect the weak against the strong, to guard the unwary against the cunning, and to punish the insolence of office, and the spirit of encroachment, and wanton injury. It needs scarcely be said, how much wisdom, talents, discretion, and virtue are indispensable for such great purposes.

In the next place, the people have taken upon themselves, in our free form of government, the responsibility of accomplishing all these ends; the protection and preservation of personal rights, of property, and public liberty. Is it quite certain, that we shall successfully accomplish such a vast undertaking? Is any considerate man bold enough to venture on such an assertion? Is not our government itself a new experiment in the history of the world? Has not every other republic, with all the wisdom, and splendor, and wealth, and power, with which it has been favored, perished, and perished by its own hands, through the might of its own factions? These are inquiries, which may not be suppressed or evaded. They must be met and delibe-

rated, they press upon the minds of thousands, who are most interested in our destiny, as patriots and statesmen. They are not disposed of by a few fine flourishes of rhetoric, or by a blind and boasting confidence. They involve the hopes and the happiness of our whole posterity ; and we must meditate on them, if we would save either ourselves or them. One of the first lessons of wisdom is to understand our dangers ; and when we understand them, we may then be prepared to meet the duties and difficulties of our position.

In the next place, we have chosen for ourselves the most complicated frame of republican government, which was ever offered to the world. We have endeavored to reconcile the apparent anomaly of distinct sovereignties, each independent of the other in its own operations, and yet each in full action within the same territory. The national government within the scope of its delegated powers is beyond all doubt supreme and uncontrollable ; and the State governments are equally so within the scope of their exclusive powers. But there is a vast variety of cases, in which the powers of each are concurrent with those of the other ; and it is almost impossible to ascertain with precision, where the lines of separation between them begin and end. No rulers on earth are called to a more difficult and delicate task, than our own, in attempting to define and limit them. If any collision shall happen, it can scarcely be at a single point only. It will touch, or it will trench, upon jealousies, interests, prejudices, and political arrangements, infinitely ramified throughout the whole extent of the union. The adjustments, therefore, to be made from time to time, to avoid such collisions, and to carry on the general system of movements, require a degree of forecast, caution, skill, and patient investigation, which nothing but long habits of reflection and the most mature experience can supply.

In the interpretation of constitutional questions alone, a vast field is open for discussion and argument. The text, indeed, is singularly brief and expressive. But that very brevity becomes of itself a source of obscurity ; and that very expressiveness, while it gives prominence to the leading objects, leaves an ample space of debatable ground, upon which the champions of all opinions may contend with alternate victory and defeat. Nay, the very habits of free inquiry, to which all our institutions conduct us, if they do not urge us, at least incite us to a perpetual renewal of the contest. So that many minds are unwilling to admit anything to be settled ; and the text remains with them a doubtful oracle, speaking with a double meaning, and open to glosses of the most contradictory character. How much sobriety of judgment, solid learning, historical research, and political sagacity are required for such critical inquiries ! Party leaders may, indeed, despatch the matter in a few short and pointed sentences, in popular appeals to the passions and prejudices of the day, or in harangues, in which eloquence may exhaust itself in studied alarms, or in bold denunciations. But statesmen will approach it with a reverend regard. They will meditate upon consequences with a slow and hesitating assent. They will weigh well their own responsibility, when they decide for all posterity. They will feel, that a wound inflicted upon the constitution, if it does not bring on an immediate gangrene, may yet introduce a lingering disease, which will weaken its vital organs, and ultimately destroy them.

But it is not in the examination and solution of constitutional questions alone, that great abilities and a thorough mastery of the principles of government are required of American statesmen. The ordinary course of legislation in the national councils is full of intricate and perplexing duties. It is not every man, who can make an animated address at a popular meeting, or run through

the common places of party declamation at the hustings with a fluent elocution and a steady presence, who is qualified for a seat in the national legislature. The interests of four and twenty states are there represented, and are there to be scrupulously weighed and protected. Look but for a moment over the vast extent of our country ; the varieties of its climates, productions, and pursuits ; its local peculiarities, and institutions ; its untiring enterprise ; and inexhaustible industry. Look to the ever changing character of agriculture ; the sugar, cotton and rice of the South ; the wheat, corn and tobacco, of the Middle States ; and the stubborn, but thrifty growth of the North, yielding to culture, what seems almost denied to climate. Look to the busy haunts of our manufactures, rising on a thousand hills, and sheltered in a thousand valleys, and fed by a thousand streams. Everywhere they are instinct with life, and noisy or noiseless industry, and pouring forth their products to every market with an unceasing flow, which gathers, 'as it goes. Look to the reaches of our foreign commerce through every region of the globe. It floats on the burning breezes of Africa ; it braves the stormy seas of the Arctic Regions. It glides with a bounding speed on the weary coasts and broad streams of Southern America. It doubles the capes of the Indias, and meets the trade winds and monsoons in the very regions of their birth. It gathers its treasures from the deep soundings of the banks of Newfoundland. It follows the seal in his secret visits to the lonely islands of the Southern Pacific. It startles the whale on his majestic march through every latitude, from the hither Atlantic to the seas of Japan. The sun shines not on the region, where its flag has not saluted the first beams of the morning. It sets not, where its last lingering rays have not played on the caps of its masts. And, then, again, look to the reaches of our internal commerce along the various inlets and bays and ports of the seaboard,

through the vast and almost interminable rivers and valleys of the West ; on the broad and restless lakes, through the deep prairies, and up the steep slopes of the Rocky mountains, and onward to the far ocean, which washes the darkened shores of two continents.

Look, I say, to these extensive yet connected interests, and who, but must admit, that to understand their intricate relations and dependencies, to gather up even the fragments of that knowledge, which it is necessary to possess in order (I will not say to guide, and direct them, but) not to mar, and destroy them, there must be years of patient, thorough, and laborious research into the true principles and policy and objects of government.

But it is not to rulers and statesmen alone, that the science of government is important and useful. It is equally indispensable for every American citizen to enable him to exercise his own rights ; to protect his own interests ; and to secure the public liberties and just operations of public authority. A republic, by the very constitution of its government, requires on the part of the people more vigilance, and constant exertion than all others. The American republic, above all others, demands from every citizen unceasing vigilance and exertion, since we have deliberately dispensed with every guard against danger or ruin, except the intelligence and virtue of the people themselves. It is founded on the basis, that the people have wisdom enough to frame their own system of government, and public spirit enough to preserve it ; that they cannot be cheated out of their liberties ; and they will not submit to have them taken from them by force. We have silently assumed the fundamental truth, that, as it never can be the interest of the majority of the people to prostrate their own political equality and happiness, so they never can be seduced by flattery or corruption, by the intrigues of faction, or the arts of ambition, to adopt any

measures, which shall subvert them. If this confidence in ourselves is justified, (and who among Americans does not feel a just pride in endeavoring to maintain it?) let us never forget, that it can be justified only by a watchfulness and zeal in proportion to our confidence. Let us never forget, that we must prove ourselves wiser, better and purer, than any other nation ever yet has been, if we are to count upon success. Every other republic has fallen by the discords and treachery of its own citizens. It has been said by one of our departed statesmen, himself a devout admirer of popular government, that power is perpetually stealing from the many to the few. It has been said by one of the greatest orators of antiquity, whose life was devoted to the republic, with a zealous but unsuccessful patriotism, that the bad will always attack with far more spirit, than the good will defend, sound principles. The republic, (said he with a melancholy eloquence,) the republic is assailed with far more force and contrivances, than it is defended, because bold and profligate men are impelled by a nod, and move of their own accord against it. But I know not, how it happens, the good are always more tardy. They neglect the beginning of things, and are only roused in the last necessity. So that sometimes, by their delay and tardiness, while they wish to retain ease, even without dignity, they lose both. Those, who are willing to be the defenders of the republic, if they are of the lighter sort, desert ; if they are of the more timid sort, they fly. Those alone remain, and stand by the republic, whom no power, no threats, no malice can shake in their resolution.* Such is the lesson of ancient wisdom, admonishing us, as from the grave ; and it was pronounced, as it were, at the very funeral of Roman liberty.

Besides, in other countries there are many artificial

* Cicero Oratio, Pro Sextio. ch. 47.

barriers against sudden changes and innovations, which retard, if they do not wholly obstruct them. There are ecclesiastical and civil establishments, venerable from their antiquity, and engrafted into the very habits and feelings and prejudices of the people. There are hereditary honors and privileges, the claims of aristocracy, and the influences of wealth, accumulated and perpetuated in a few families. We have none of these to embarrass, or overawe us. Our Statutes, regulating the descent of estates, have entirely broken down all the ordinary means of undue accumulation ; and our just pride is, that the humblest and highest citizens are upon a footing of equality. Nothing here can resist the will of the people ; and nothing certainly ought to resist their deliberate will. The elements of change are, therefore, about us in every direction, from the fundamental articles of our constitutions of government, down to the by-laws of the humblest municipality.

Changes then may be wrought by public opinion, wherever it shall lead us. They may be sudden, or they may be slow ; they may be for the worse, as well as for the better ; they may be the solid growth of a sober review of public principles, and a more enlightened philosophy ; or they may be the spurious product of a hasty and ill advised excitement, flying from evils, which it knows and feels, to those far greater, which it sees not, and may never be able to redress. They may be the artful delusions of selfish men taking advantage of a momentary popularity, or the deep laid plan of designing men to overthrow the foundations of all free institutions. This very facility of introducing changes should make us more scrupulous in adopting innovations, since they often bring permanent evils in their train, and compensate us only by accidental and temporary good. What is safe, is not always expedient ; what is theoretically true, is often practically false, or doubtful ; what at first glance seems beneficial and plausible, is upon

more mature examination often found to be mischievous or inefficient ; what constitutes the true policy and security of free governments lies not unfrequently so distant from immediate observation and experience, that it is rashly rejected, or coldly received. Hence, it has been remarked, that a free people rarely bestow on good rulers the powers necessary for their own permanent protection, and as rarely withhold from bad ones those, which may be used for their own destruction.

Again, independently of the common causes, which are constantly at work in all governments, founded upon the common passions and infirmities of human nature, there are in republics some peculiar causes to stimulate political discontents, to awaken corrupt ambition, and to generate violent parties. Factions are the natural, nay, perhaps the necessary, growth of all free governments ; and they must prevail with more activity and influence, just in proportion, as they enlist in their ranks the interests and power of numbers. Where all the citizens are, practically speaking, voters, it is obvious, that the destiny of public men and public measures must essentially depend upon the contest at the polls, and the wisdom of the choice, which is there made. We need not be told that many other influences are present on such occasions, than those, which arise from talents, merit and public services. We need not be told how many secret springs are at work to obstruct that perfect freedom and independence of choice, which are so essential to make the ballot box the just index of public opinion. We need not be told, how often the popular delusions of the day are seized upon to deprive the best patriots of their just reward, and to secure the triumph of the selfish, the cunning, and the time-serving. And yet, unless the people do at all times possess virtue and firmness and intelligence enough to reject such mischievous influences ; unless they are well instructed in public affairs,

and resolutely maintain the principles of the constitution, it is obvious, that the government itself must soon degenerate into an oligarchy ; and the dominant faction will rule with an unbounded and desolating energy. The external forms and machinery of the republic may continue to exist, like the solemn pageantry of the Roman Senate in the times of the emperors ; but the informing spirit will have departed, and leave behind it only the faded and melancholy memorials of irretrievable decay.

I have but glanced at these considerations, each of which might well furnish a topic for a full discourse. If the remarks already suggested are in any measure well founded, they establish the great truth, that as in the American republic the people themselves are not only the source of all power, but the immediate organs and instruments of its due exercise at all times, it is of everlasting importance to them to study the principles of government ; and thoroughly to comprehend men, as well as measures, tendencies as well as acts, and corrupting influences, as well as open usurpations. To whom can we justly look for the preservation of our public liberties and social rights ; for the encouragement of piety, religion and learning ; for the impartial administration of justice and equity ; for wise and wholesome laws and a scrupulous public faith ; but to a people, who shall lay a solid foundation for all these things in their early education, who shall strengthen them by an habitual reverence, and approbation ; and who shall jealously watch every encroachment, which may weaken the guards, or sap the supports, on which they rest ?

And this leads me to the next topic, upon which I propose to address you ; and that is the practicability of teaching the science of government as a branch of popular education. If it be not capable of being so taught, then, indeed, well may patriots and philanthropists, as well as philosophers, sink into profound despair in regard to the

duration of our republic. But it appears to me, that we are by no means justified in arriving at such a desponding conclusion. On the contrary, we may well indulge a firm and lively hope, that, by making the science of government an indispensable branch of popular education, we may gradually prepare the way for such a mastery of its principles by the people at large, as shall confound the sophist, repress the corrupt, disarm the cunning, animate the patriotic, and sustain the moral and religious.

It is true, that a thorough mastery of the science of government in all its various operations requires a whole life of laborious diligence. But it is equally true, that many of its general principles admit of a simple enunciation, and may be brought within the comprehension of the most common minds. In this respect it does not materially differ from any of the abstract physical sciences. Few of the latter are in their full extent within the reach of any, but the highest class of minds ; but many of the elements are nevertheless within the scope of common education, and are attainable by ordinary diligence. It is not necessary, that every citizen should be a profound statesman. But it may nevertheless be of vast consequence, that he should be an enlightened, as well as an honest voter, and a disciplined thinker, if not an eloquent speaker. He may learn enough to guard himself against the insidious wiles of the demagogue, and the artful appeals of the courtier, and the visionary speculations of the enthusiast, although he may not be able to solve many of the transcendental problems in political philosophy.

In the first place, as to the constitution of the United States ; and similar considerations will apply with at least equal force to all the State constitutions. The text is contained in a few pages, and speaks a language, which is generally clear and intelligible to any youth of the higher classes at our common schools before the close of their

usual academical studies. Nay, it may be stated with confidence, that any boy of ordinary capacity may be made fully to understand it between his fourteenth and sixteenth year, if he has an instructor of reasonable ability and qualifications. He may become possessed of the actual organization and powers of the government, under which he lives, to which he is responsible, and which he is enjoined by every duty of patriotism and interest to transmit unimpaired to future generations. He may practically learn the leading divisions of the great powers of all governments into legislative, executive, and judicial. He may ascertain in some general way the definite boundaries and appropriate functions of each. He may understand yet more; that there are checks and balances everywhere interposed to limit power, and prevent oppression, and ensure deliberation, and moderate action. He may perceive, that the House of Representatives cannot make laws without the co-operation of the Senate: That the President cannot make appointments without the consent of the Senate; and yet, that the President can by his qualified veto arrest the legislative action of both houses. He may perceive that the judiciary in many parts of its organization acts through, and by, and under the will of the legislature and executive; and yet that it stands in many respects independent of each. Nay, that it has power to resist the combined operations of both; and to protect the citizens from their unconstitutional proceedings, whether accidental or meditated. He may perceive, that the State governments are indispensable portions of the machinery of national government. That they in some cases control it; and in others again are controlled by it. That the same supreme law, which promulgates prohibitions upon certain acts to be done by the States, at the same time promulgates like prohibitions upon the acts of the United States. He may perceive, that there are certain leading principles laid down as the

fundamental rules of government ; and that they constitute a solemn bill of rights, which must be obeyed, and cannot be gainsaid. He may perceive, that the trial by jury is preserved, as a matter of right, in all cases of crimes, and generally also in civil cases ; that the liberty of speech and of the press are constitutionally vindicated ; that no national religion can be imposed upon the community ; that private property cannot be taken away without adequate compensation ; and that the inviolability of public and private contracts is strenuously enforced.

Having arrived at this clear and definite view of the distribution of the powers of government, with the appropriate restrictions belonging to them, he can scarcely fail to ask, what are the reasons, which induced the framers of the constitution to adopt them. It is scarcely possible, that he should be so dull, as not to have some desire to gratify, or so indifferent, as not to have some curiosity to indulge, by such inquiries. When he is told on every side, that this is the form of government best calculated to secure his personal happiness, and animate his love of liberty, it would be incredible, that he should feel no interest in ascertaining, why and wherefore it is so. Why, for instance, legislation may not as well be confided to one body, as to two distinct bodies ? Why unity in the executive is preferable to plurality of numbers ? Why the judiciary should be separated from the other branches ? Why, in short, simplicity in government is destructive of public liberty ; and a complex machinery of checks and balances is indispensable to preserve it ? Inquiries of this sort, if they do not spontaneously rise up in his own mind, cannot be presented to it by his instructor without opening new and various sources of reflection. He will thus be conducted to the threshold of that profound science, which begins and ends with the proper study of man in all his social relations.

And, here, again, it may be confidently affirmed, that there is not the slightest difficulty in unfolding to our youth the true nature and bearing of all these arrangements, and the reasons, on which they are founded. Although they are the result of human wisdom, acting upon the most comprehensive human experience, and have tasked the greatest minds to discover and apply them; they are nevertheless capable of as exact a demonstration, as any other problems of moral philosophy applied to the business of human life. It required the genius of Newton to discover the profound mystery of the universal law of gravitation; but every school boy can now reason upon it, when he bathes in the refreshing coolness of the summer stream, or gazes with unmixed delight on the beautiful starlight of the wintry heavens. So it is with political philosophy. Its great truths can be clearly taught, and made familiar to the juvenile mind, at the same time, that they may well employ the most exalted powers of the human understanding. What more difficulty, for instance, is there in a scholar's comprehending the value of checks and balances and divisions of power in a government, than in comprehending the value of good order and discipline in a school, or the propriety of trustees laying down rules to regulate and control the head master, and the other rules to guide and direct his ushers? The principles may not, indeed, always be obvious to the narrow circle of his thoughts; but they can be pointed out. They may lie too remote for his immediate observation; but he may learn the paths, by which they may be explored. They may not as yet be within his grasp; but he can be taught, how they may be reached by skill and diligence. He may not as yet see their full extent and operation; but his vision will gradually expand, until he can seize on the most distant objects, and bring them, as it were, under the eye of his mind with a close and cloudless certainty.

Every element of knowledge, which he thus gradually acquires, will soon become incorporated into his former stock, until at last he has accumulated a capital, upon which he may safely set up for himself; and by widening, and deepening, and strengthening the foundations, he may at length acquire a character for political wisdom and ability, which shall make him at once an ornament and a blessing to his country, even though he may never pass beyond the precincts of his native village. He may there be able to quiet the discontented murmurs of a misguided populace. He may there repress the ordinate love of innovation of the young, the ignorant, and the restless. He may there stand the unconquerable friend of liberty; recommending it by his virtues, and sustaining it by his councils. He may there withstand the village tyrant, too often disguised under the specious character of the village demagogue. And he may there close his life with the conscious satisfaction, that as a village patriot, he has thus filled up the full measure of his duties, and has earned a far more enviable title to true glory, than the conqueror, who has left the dark impressions of his desolations in the ruined hopes and fortunes of millions.

If, on the other hand, a higher destiny awaits him, if he is called to take a part in the public councils of the state or nation, what immense advantages must such preparatory studies and principles give him over those, who rise into public life by the accidents of the day, and rush into the halls of legislation with a blind and daring confidence, equalled only by their gross ignorance, and their rash ardor for reform. For weal or for wo, our destiny must be committed to the one or the other, of these classes of rulers, as public opinion shall decide. Who would willingly commit himself to the skill of a pilot, who had never sounded the depths, or marked the quicksands of the coast? Who would venture to embark his all on board a ship, on a short

voyage, (far more, on the voyage of life,) when the crew have not learned how to trim the sails, and there is neither chart or compass on board to guide the navigation ?

I am not aware, that there are any solid objections, which can be urged against introducing the science of government into our common schools as a branch of popular education. If it should be said, that it is too deep and difficult for the studies of youth, that objection assumes the very matter in controversy ; and, if the observations already made are well founded, it is wholly indefensible. If it should be said, that it will have a tendency to introduce party creeds and party dogmas into our schools, the true answer is, that the principles of government should be there taught, and not the creeds or dogmas of any party. The principles of the constitution, under which we live ; the principles upon which republics generally are founded, by which they are sustained, and through which they must be saved ; the principles of public policy, by which national prosperity is secured, and national ruin averted ; these certainly are not party creeds, or party dogmas, but are fit to be taught at all times and on all occasions, if anything, which belongs to human life and our own condition, is fit to be taught. If we wait, until we can guard ourselves against every possible chance of abuse, before we introduce any system of instruction, we shall wait until the current of time has flowed into the ocean of eternity. There is nothing, which ever has been, or ever can be taught without some chance of abuse, nay, without some absolute abuse. Even religion itself, our truest and our only lasting hope and consolation, has not escaped the common infirmity of our nature. If it never had been taught, until it could be taught with the purity, simplicity, and energy of the apostolic age, we ourselves, instead of being blest with the bright and balmy influences of Christianity, should now have been groping our

way in the darkness of heathenism, or left to perish in the cold and cheerless labyrinths of skepticism.

If it be said, that there is not time, or means suitable to learn these principles in our common schools, the true answer is, that, if the fact be so (which is not admitted), more time should be given, and more ample means be supplied for the purpose. What is the business of education, but to fit men to accomplish their duties and their destiny? And, who is there among Americans, that is not called to the constant performance of political duties, and the exercise of political privileges? He may perform, or use them, well or ill. But the results of the use and abuse are, and ever will be mixed up with his own intimate interests. The perils, he may choose, that others shall encounter, he must share in common with them. He is embarked in the same ship of state, and the shipwreck, which shall bury the hopes of others, will not spare his own. What blessings in human life can fairly be put in competition with those derived from good government and free institutions? What condition can be more deplorable, than that, where labor has no reward, property no security, and domestic life no tranquillity? Where the slave is compelled to kiss the chain, which binds him to wretchedness, and smile upon his oppressor, while his heart is writhing in agony? Let not Americans forget, that Greece, immortal Greece, has been free; and yet that thousands of years have already rolled over her servitude. That Italy, beautiful Italy, has been free; but where is now her republican grandeur? The Appenines still lift up their bold and rugged peaks; the sun still looks down upon her plains with a warm and cloudless splendor; — but the spirit of liberty is not there; and Rome has become, as it were, the vast sepulchre of her own perished glory.

But, independent of the grave considerations, already urged in favor of the introduction of political studies into

our system of popular education, there are other collateral advantages, which should not be wholly passed by.

In the first place, there are no studies better fitted to discipline the mind, or to accustom it to severe and close investigation. They combine in a very high degree the speculations of philosophy with the varied events of history, and increase the separate interest of each. They have a tendency to enlarge, and liberalize the mind, by familiarizing it with comprehensive views of men and things. They are capable of an indefinite expansion, and variety ; such as may employ the whole leisure of the most retired scholar, or suit the short and hasty intervals of the man of business. They gather up new materials in the daily intercourse of society ; and at the same time they enable us to expound its apparent anomalies, and classify its varied results.

In the next place, they have a powerful tendency to counteract the rash and hasty judgments, which youth and inexperience naturally produce in ardent and inquisitive minds. Nothing is so fascinating, and so delusive, as the simplicity of theory, in the earlier stages of life. It not only flatters that pride of opinion, which results from a supposed mastery of important truths ; but it gratifies that fresh and vigorous confidence, which hopeth all things, and believeth all things. The severe lessons of experience do, indeed, generally correct, or demolish these visionary notions. But they often come so slow, that irreparable mistakes have been already committed ; and the party is left to mourn over the blight of his own prospects, or the impending dangers to his country. Nothing can have a more salutary effect in repressing this undue pride and confidence than the study of the science of government. The youth is there taught, how little reliance can be placed upon mere abstract speculations ; how often that, which is theoretically true, becomes practically mischievous ; how complicated is the machinery necessary

to carry on the operations of a good government; how many nice adjustments are required to give full play and activity to the system; how slow every change must be to be safe, as well as improving; and, above all, how often the wisest statesmen, the truest patriots, and the most profound reasoners find defects, where they had least suspected them; and their labors, begun with energy and confidence, end in disappointment and mortification. Nay, systems of government, which have been apparently reared with consummate skill and solidity, have often been found buried in ruins, before the capstone has been placed upon them; and while the architect has been still gazing on his own work he has become the first victim of its ponderous magnificence.

Considerations of this sort cannot wholly escape an ingenious youth upon the most cursory examination of government, as it is read by the lights of history. They will naturally inspire caution, if they do not awaken distrust; and when at every step of his advancement in political studies, he finds himself compelled to surrender some imagined truth, to discredit some popular dogma, and to doubt some plausible theory; he cannot but profit by the instructions, which they hold out, and the admonitions, which they silently inculcate. A nation, whose citizens are habitually attentive to the principles and workings of government, may sometimes be betrayed; but it can scarcely be ruined. At least it cannot be enslaved, until it has sunk so low in corruption, that it will hail the presence of any tyrant to escape from the terrible scourges of anarchy.

But it may be asked, and this is the last topic, on which I propose to address you, in what mode is the science of government to be taught in our common schools? The answer may be given in a few words. It is by the introduction and constant use of suitable elementary works, which unfold

the principles of government, and illustrate their application, and in an especial manner with reference to the forms of the American Constitutions. Such works should not only be read but be studied as class books. The instructor, if he possesses common skill and ingenuity, may easily make them, not a dry task, but an interesting exercise. By bringing constantly before the school in the course of reading and recitation, and occasional explanations, the leading principles of government, he will gradually make the pupils familiar with their bearing and value. They may not at once arrive at the various truths, which are designed to be taught ; but they will silently master them. And by the time they have passed through the usual preparatory studies of the school, they will have acquired a stock of materials for future use of inestimable value — a stock, which will furnish perpetual sources for meditation, and enable them to lay a broad foundation for the due discharge of the duties of private citizens, and the more arduous employments of public life.

Lord Brougham, one of the most powerful advocates of popular education in our day, has made the following remarks, which cannot be more fitly addressed to the consideration of any other body than that, which I have now the honor to address. “ A sound system of government,” says he, “ requires the people to read and inform themselves upon political subjects ; else they are the prey of every quack, every impostor, and every agitator, who may practise his trade in the country. If they do not read ; if they do not learn ; if they do not digest by discussion and reflection, what they have read and learned ; if they do not qualify themselves to form opinions for themselves, other men will form opinions for them, not according to the truth and the interests of the people, but according to their own individual and selfish interest, which may, and most probably will, be contrary to that of the people at large. The

best security for a government, like ours, (a free government,) and generally for the public peace and public morals is, that the whole community should be well informed upon its political, as well as its other interests. And it can be well informed only by having access to wholesome, sound, and impartial publications."

I shall conclude this discourse with a single sentence borrowed from the great work of Cicero on the Republic, the most mature, and not least important of his splendid labors — a sentence which should always be present to the mind of every American citizen, as a guide and incentive to duty. "Our country," said that great man, "has not given us birth, or educated us under her law, as if she expected no succor from us; or that, seeking to administer to our convenience only, she might afford a safe retreat for the indulgence of our ease, or a peaceful asylum for our indolence. But that she might hold in pledge the various and most exalted powers of our mind, our genius, and our judgment, for her own benefit; and that she might leave for our private use such portions only, as might be spared for that purpose."*

* Cicero De Republicâ. L. 1. ch. 4.

